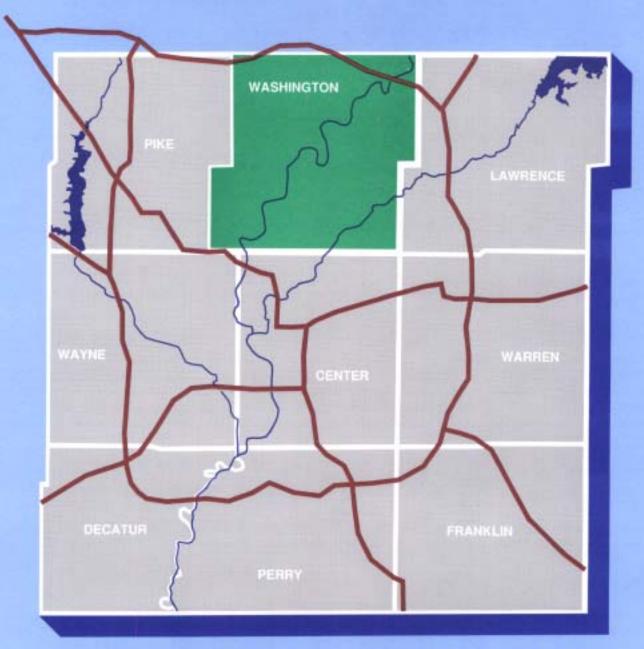
WASHINGTON TOWNSHIP



COMPREHENSIVE LAND USE PLAN

93 CPS-R-6

ADOPTED DECEMBER 1, 1993

DEPARTMENT OF METROPOLITAN DEVELOPMENT PLANNING DIVISION CITY OF INDIANAPOLIS-MARION COUNTY, INDIANA



Washington Township Comprehensive Land Use Plan

Prepared by:

Department of Metropolitan Development

Planning Division

Indianapolis-Marion County, Indiana

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Washington Township Comprehensive Land Use Plan

Introduction

Washington Township, located in north central Marion County, is one of the most developed townships in Marion County. If Washington Township's development rate over the past two decades continues, much of the township's remaining open space could be developed by the year 2020. Future development likely will be affected by--among other things--White River. construction of a 96th Street bridge over White River, Interstate 465, two recently abandoned railway corridors, and some of the most well established neighborhoods in Marion County.

Detailed data on population, land use, zoning, transportation, schools, utilities, and other township characteristics are included in the Washington Township Planning Study Data Inventory. The Data Inventory was compiled by the Department of Metropolitan Development's Planning Division in preparation for revising the Washington Township Comprehensive Plan.

To initiate the planning process for Washington Township in March 1993, the Planning Division widely distributed the Data Inventory. At the same time a Washington Township Planning Committee was formed to generate ideas and make land use recommendations for the Washington Township Comprehensive Plan revision. The Planning Committee meetings were conducted in a town meeting fashion, and were open to anyone who wished to attend. The meetings resulted in the land use recommendations for the Washington Township Comprehensive Land Use Plan Map and this Washington Township Comprehensive Plan Narrative, [to be] adopted in December, 1993.

This Comprehensive Plan narrative contains a summary of Washington Township's demographic trends, land use issues, and planning and development goals; a list of the 1991 Thoroughfare Plan priority improvements for township roadways; and sections detailing the stages of urban development and critical areas in the township.

The Washington Township Comprehensive Plan revision, a part of the Comprehensive Plan for Marion County, is comprised of this narrative, its accompanying Washington Township Comprehensive Land Use Plan Map, and the Official Thoroughfare Plan for Marion County. The information, policies, and recommendations that make up this Comprehensive Plan document should be viewed in the context of these other adopted documents and the Marion County Comprehensive Plan Narrative, which was revised and adopted in October, 1991.

The Washington Township Comprehensive Plan is a policy guide for the development of the community. The purpose of the Comprehensive Plan is:

- to improve the quality of the physical environment of the community in response to social, economic, and physical realities and forecasts;
- to provide for the well-being of the entire township community rather than to advance the special interests of individuals or groups within the community;
- to promote community goals, objectives, and policies;
- to coordinate the political and technical aspects of community development in order to eliminate conflict or duplication of public and private projects;
- to insert long-range considerations of goals in decisions about short-range actions; and
- to enhance citizen participation in community development and provide citizens with a sense of security and civic pride.

Township Population and Land Use Characteristics

- Over the past three decades, Washington Township's population grew at a moderate rate, making it the second most populous township in Marion County.
 - In the 1960s, when Center Township was the only Marion County township to lose population, Washington Township's population grew from 97,861 persons to 126,136 persons. This equals a 29% growth rate, compared to the higher rates of 125% in Pike Township and 93% in Lawrence Township. On the other hand, Washington Township began the 1960s with a population base over ten times the size of Pike Township and nearly three times the size of Lawrence Township. Therefore, even though Washington Township's absolute growth in population was about three-quarters that of its neighboring north-side townships combined, Washington Township's growth rate was significantly lower.
 - Washington Township's population grew by 2% during the 1970s, when it caught and passed Wayne Township to become the second most populous township in Marion County behind Center Township. At the same time, Pike Township's growth rate was 69%, and Lawrence Township's was 14%.
 - According to the 1980 and 1990 U.S. Census reports, Washington Township retained its 16.8% share of Marion County's total population during the last decade. Between 1980 and 1990, Washington Township's growth rate was 4%, ranking it sixth in Marion County ahead of Center, Warren, and Wayne

Townships. By comparison, Pike Township's and Lawrence Township's populations increased more rapidly in the 1980s, by 78% and 25%, respectively.

The 1990 Census shows that Washington Township averaged 2.3 persons per household, slightly below the average for all of Marion County (2.5 persons). As in the rest of Marion County, the average household size has steadily decreased. In Washington Township, the declining average household size helps explain why even though its population grew by only 6% between 1970 and 1990, the number of occupied housing units increased by 40%.

Comprehensive Plan Response - The Washington Township Comprehensive Plan encourages the development of parks and other public facilities, or services, necessary to adequately serve the township's large, growing population. The plan encourages future development to occur where adequate services already exist. Where services are not adequate, the plan recommends that new development provide (or make other commitments for the provision of) expanded services required to serve the new growth.

In addition, the plan continues to recommend undeveloped infill areas of the township for various densities of residential growth. The residential recommendations for undeveloped land range from Very Low to High Density, or from less than one dwelling unit per acre to more than fifteen dwelling units per acre.

- Washington Township, which is over 80% developed, contains some of Marion County's most well known and prestigious neighborhoods as well as areas in need of revitalization.
 - Over 80% of Washington Township's land is developed, making it the second most developed township in Marion County behind Center Township.
 The suburban Marion County townships bordering Washington--Pike Township and Lawrence Township--are both approximately two-thirds developed.
 - In 1973, over 21,000 acres of Washington Township's 31,145 acres were developed. Since then, about 5000 more acres have been developed, an increase of more than 20%. Over the same two decades, Pike and Lawrence Townships developed at about triple and double Washington Township's rate, respectively.
 - The northeastern quadrant of Washington Township contains nearly half of the township's undeveloped land. This quadrant is also the fastest developing area of the township. Most of the remainder of Washington

Township's undeveloped land lies in stream valleys and their associated floodplains.

The southern portion of Washington Township, the most established part of the township, is nearing full development. This part of the township contains some of the most historic and prestigious neighborhoods in Marion County, including Meridian-Kessler, Butler-Tarkington, and Broad Ripple. The southern portion of Washington Township also contains the township's neighborhoods most in need of reinvestment and revitalization, particularly some areas near Michigan Road, 38th Street, the Indiana State Fairgrounds, and 42nd Street and College Avenue.

Comprehensive Plan Response - The revised Comprehensive Plan recommends a wide range of land uses for the township's remaining undeveloped areas (see Table 1). Some of these undeveloped areas may be susceptible to the development of incompatible uses or uses that overburden the infrastructure system. These areas are identified as critical areas and discussed in this narrative.

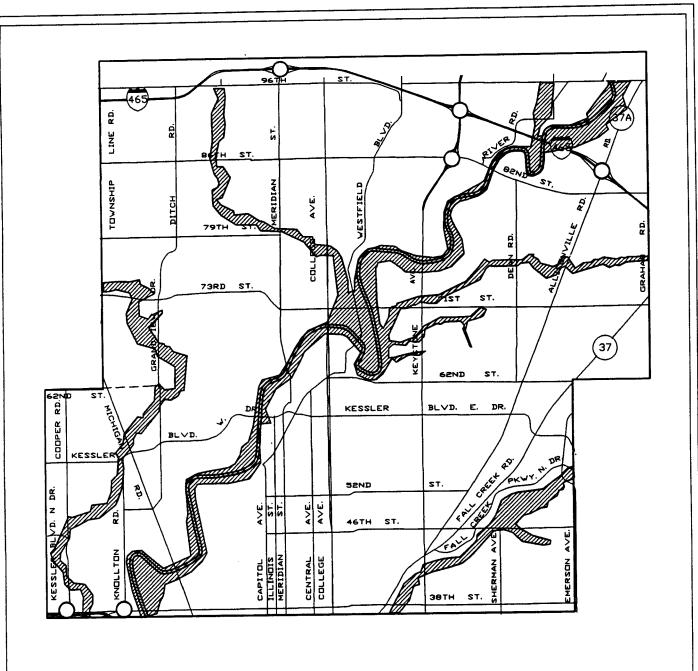
- With little undeveloped land in Washington Township outside of stream valleys and floodways, protection of the township's natural resources and park and recreation opportunities becomes more urgent.
 - The largest undeveloped area of Washington Township, the northeast quadrant, is an area dominated by White River and its floodway fringe. Any proposed development in this area must be sensitive to the area's flooding potential and to possible wetlands, woodlands, and wildlife habitats (see Maps 1, 2, and 3). The same applies to the remainder of White River and to undeveloped portions of Crooked Creek, Fall Creek, and Williams Creek. The significance of Williams Creek as a natural resource is documented by Indiana University students in their 1993 study, "Williams Creek Ecological Assessment." The students presented the study to the Washington Township Planning Committee during the planning process.
 - Washington Township is currently underserved by Neighborhood and Community Park acreage in proportion to its population. Washington Township has only 2.4 acres of park land per 1000 persons, the lowest percentage of any township in Marion County. By comparison, Lawrence Township has 6.2 acres of park land per 1000 persons. Pike Township, with 103.4 acres per 1000 persons, is an anomaly in Marion County, because it contains Eagle Creek Park.
 - A few undeveloped areas suitable for public parks still exist in Washington Township. Some of the undeveloped land is owned by the Metropolitan School District of Washington Township. Other land is owned by private

Table 1

Comparisons of Existing Land Use and Comprehensive Plan Recommendations Washington Township

Residential Acres % of Twp.	Land Use Category	1990 L	1990 Land Use	1984 Co Land Us	1984 Comprehensive Plan Land Use Recommendations	1993 Col Land Us	1993 Comprehensive Plan Land Use Recommendations
10390 33.3 14481 46.5 12959 12959 12945 12959 12945 12959 12945 12959 12959 12959 12950	Pecidential	Acres	% of Twp.	Acres	% of Twp.	Acres	% of Twp.
6505 20.9 6291 20.2 7143 2345 7.5 3665 11.8 2861 19262 61.8 24631 79.1 2861 19262 61.8 24631 79.1 2302 533 1.7 * * 1486 1115 3.6 * * 1486 1115 3.6 * * 1486 1116 3.6 * * 1486 1116 3.6 * * 1486 1116 3.3 1.865 6.0 2346 234 0.1 0 0.0 0 0 30 0.1 0 0.0 0.0 0 0 270 0.2 2991 1.9 3266 282 1.7 0.5 202 202 0.6 1.71 0.5 202 202 0.6 1.71 0.5 202	Very Low Density	10390	33.3	14481	46.5	12959	41.6
2345 7.5 3665 11.8 2861 22 0.0 194 0.6 63 19262 61.8 24631 79.1 23026 533 1.7 * * * 860 1115 3.6 * * 1486 1115 3.6 . * 2346 1648 5.3 1865 6.0 2346 36 0.1 0 0.0 0 0 37 80 1.9 302 302 302 483 1.1 362 1.9 302 302 483 1.5 545 1.7 1035 202 483 15.5 4069 13.1 841 11 31,145 100.0 31,145 11	Low Density	6505	20.9	6291	20.2	7143	22.9
22 0.00 194 0.6 63 19262 61.8 24631 79.1 23026 533 1.7 * * * * 860 1115 3.6 * * * * 1486 1648 5.3 1865 6.0 2346 1648 5.3 1865 6.0 2346 234 0.8 580 1.9 302 240 0.0 0.0 0.0 0.0 250 1.2 968 151 300 4.2 545 1.7 1035 155 4069 13.1 54145 100.0 31,145 11	Medium Density	2345	7.5	3665	11.8	2861	9.2
19262 61.8 24631 79.1 23026 2333 1.7 * * * * * * * * * * * * * * * * * *	High Density	22	0.0	<u>\$</u>	9.0	63	0.2
533 1.7 * * 860 1115 3.6 * * 1486 1648 5.3 1865 6.0 2346 1648 5.3 1865 6.0 2346 234 0.8 580 1.9 302 36 0.1 0 0.0 30 30 570 0.9 580 1.9 30 30 6 2991 9.6 2991 9.6 3266 1 7 1300 4.2 545 1.7 1035 1035 84 5132 16.5 4669 13.1 5471 1 81,145 100.0 31,145 10 31,145 10	Total	19262	8.19	24631	79.1	23026	74.0
533 1.7 * * * 860 1115 3.6 * * 1486 1648 5.3 1865 6.0 2346 1648 5.3 1865 6.0 2346 234 0.8 5.3 1.9 302 36 0.1 0 0 0 0 270 0.9 580 1.9 302 0 1300 4.2 580 1.2 968 1 202 4.2 545 1.7 1035 202 4833 15.5 4069 13.1 5471 1 31,145 100.0 31,145 10 31,145 10	ommercial						
1115 3.6	Office	533	1.7	*	*	980	2.8
1648 5.3 1865 6.0 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 236 236 236 2366 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 2346 23471 2348 232 232 232 232 232 232 232 232 232 23471	Retail	1115	3.6	*	#	1486	4.
234 0.8 580 1.9 302 36 0.1 0.0 0.0 0 270 0.9 580 1.9 302 270 0.9 580 1.9 302 328 1.1 362 1.2 968 1300 4.2 2991 9.6 3266 1 202 0.6 171 0.5 202 4833 15.5 4069 13.1 547 1 31,145 100.0 31,145 100.0 31,145 10	Total	1648	5.3	1865	0.9	2346	7.5
234 0.8 580 1.9 302 302 302 36 36 270 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	ndustrial						
36 0.1 0 0.0 0 270 0.9 580 1.9 302 328 1.1 362 1.2 968 1300 4.2 2991 9.6 3266 1 202 0.6 171 0.5 202 4833 15.5 4069 13.1 5471 1 31,145 100.0 31,145 100.0 31,145 10	Light	234	8.0	280	1.9	302	1.0
270 0.9 580 1.9 302 328 1.1 362 1.2 968 kea 3003 9.6 2991 9.6 3266 1 202 0.6 171 0.5 202 4833 15.5 4069 13.1 547 1 31,145 100.0 31,145 100.0 31,145 10	Heavy	36	0.1	0	0.0	0	0.0
328 1.1 362 1.2 968 3266 32691 9.6 3266 3266 3266 4.2 545 1.7 1035 1035 202 0.6 171 0.5 202 4833 15.5 4069 13.1 54145 100.0 31,145 100.0 31,145 100.0	Total	270	6:0	580	1.9	302	1.0
# 328 1.1 362 1.2 968 3003 9.6 2991 9.6 3266 202 4.2 545 1.7 1035 4833 15.5 4069 13.1 5471 31,145 100.0 31,145 100.0 31,145 10	ublic/Semi-Public						
t 3003 9.6 2991 9.6 3266 kcss 1300 4.2 545 1.7 1035 202 0.6 171 0.5 202 4833 15.5 4069 13.1 5471 31,145 100.0 31,145 100.0 31,145 11	Parks	328	1.1	362	1.2	%	3.1
kea 1300 4.2 545 1.7 1035 202 0.6 171 0.5 202 4833 15.5 4069 13.1 5471 31,145 100.0 31,145 100.0 31,145 11	Special/Public Use**	3003	9.6	2991	9.6	3266	10.5
202 0.6 171 0.5 202 4833 15.5 4069 13.1 5471 al 5132 16.5 *** *** *** ***	Rivers, Streams, Lakes	1300	4.2	\$45	1.7	1035	3.3
4833 15.5 4069 13.1 5471 al 5132 16.5 *** *** *** 31,145 100.0 31,145 100.0 31,145 11	Interstates	202	9.0	171	0.5	202	9.0
al 5132 16.5 **** **** 31,145 100.0 31,145 100.0 31,145	Total	4833	15.5	4069	13.1	5471	17.6
31,145 100.0 31,145 100.0 31,145	acant or Agricultural	5132	16.5	**	**	**	#
	otal, All Categories	31,145	100.0	31,145	100.0	31,145	100.0

^{*} The 1984 Comprehensive Plan did not differentiate between office and retail commercial uses. ** The 1984 and 1993 Comprehensive Plan land use acreage totals for Public/Semi-Public use include Urban Conservation. *** The 1984 and 1993 Comprehensive Plans assume full development of the township, with no vacant or agricultural land.

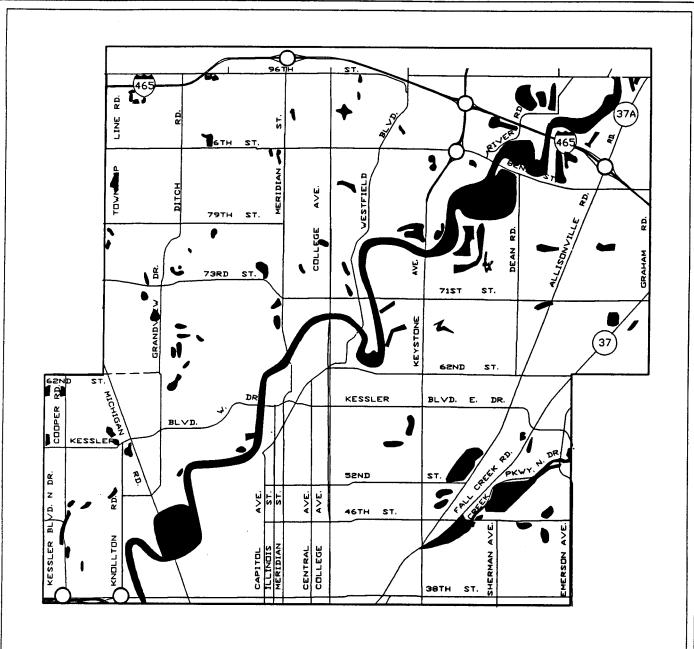


WASHINGTON TOWNSHIP GENERALIZED FLOODPLAINS

100-YEAR FLOOD BOUNDARY

THE PREPARATION OF THIS MAP WAS FINANCED IN PART BY A COMMUNITY DEVELOPMENT BLOCK GRANT





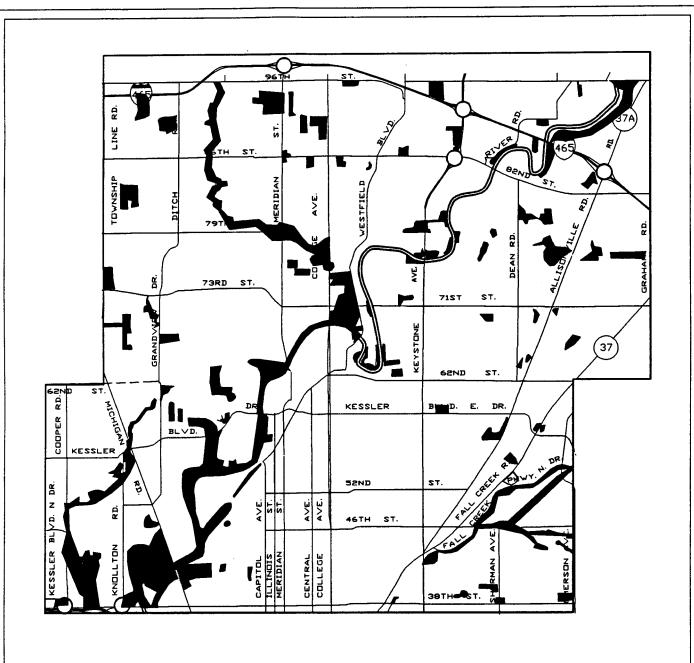
MAP 2 WASHINGTON TOWNSHIP GENERALIZED WETLANDS



SOURCE: U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY, 1993
THIS MAP IS NOT EXHAUSTIVE. IT INCLUDES MOST NON-STREAM WETLANDS OF TEN
ACRES OR MORE. FOR MORE COMPLETE INFORMATION REFER TO THE NATIONAL
WETLANDS INVENTORY OR THE U.S.D.A. SOIL CONVERSATION SERVICE.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART BY A COMMUNITY DEVELOPMENT BLOCK GRANT





MAP 3 WASHINGTON TOWNSHIP GENERALIZED WOODLANDS



WOODED AREAS

SOURCE: DIVISION OF PLANNING AERIAL PHOTOGRAPHS, MARCH 1991,

NOTE: THIS MAP IS NOT EXHASUTIVE. IT INCLUDES MOST

WOODLANDS OF TEN ACRES OR MORE.

THE PREPARATION OF THIS MAP WAS FINANCED IN PART BY A COMMUNITY DEVELOPMENT BLOCK GRANT



entities or is within White River's 100-year flood boundary. As in other areas of Marion County, for all land areas located within floodplain or floodway areas, the development regulations specified in the Flood Control Districts Zoning Ordinance apply.

The abandoned Monon Railway, the IWC Canal, and Fall Creek present excellent opportunities for linear park corridors. Parts of the IWC Canal and Fall Creek are already used as linear parks. After an extensive planning process, the public and city officials have also determined that the Monon Railway Corridor should be developed as a public linear park. The Monon Corridor will connect with the other two linear parks to form part of the Indianapolis Greenways' system.

Comprehensive Plan Response - The Comprehensive Plan recommends protection of these valuable natural resources, including development of parks where recommended. The plan also recommends Urban Conservation or Linear Park uses for the White River, Williams Creek, and Fall Creek floodways as well as the Indianapolis Water Company Canal and the abandoned Monon Railway Corridor. These linear parks connect parks with residential areas, other parks, or other compatible land uses. The plan strongly discourages any development in wetland areas. The plan's recommendations closely follow those of the Comprehensive Parks, Recreation, and Open Space Plan for Marion County.

- Washington Township's roadway, sewer, and drainage systems are primarily in place, but should be improved in some areas.
 - Although many roadway segments are currently operating below capacity, 20% of Washington Township's key roadway segments are above capacity. These roadway segments include portions of I-465, State Road 37, 62nd Street, 82nd Street, 86th Street, Allisonville Road, Ditch Road, Kessler Boulevard, Kessler Boulevard North Drive, Keystone Avenue, Meridian Street, Michigan Road, and Westfield Boulevard. Approximately one-quarter of the township's roadways are projected to be operating near, at, or above capacity by the year 2005.
 - The drainage systems in some parts of Washington Township are not adequate to handle demand. Much of Washington Township's drainage problems can be attributed to the township's soils, which are poorly drained.
 - Large portions of Washington Township are presently not served by sewers. Reliance upon septic systems is discouraged by the Marion County Health Department. Some areas with aged infrastructure are in need of sewer system repair or replacement.

Comprehensive Plan Response - Land use types and intensities appropriate to the projected future capacities of the infrastructure are recommended by the Comprehensive Plan. In addition, the plan's policy recommendations include the stipulation that new developments should provide or make commitments for the provision of whatever additional infrastructure is needed to serve those developments. The City of Indianapolis-Marion County Capital Improvements Program is the most important mechanism for implementing needed infrastructure improvements in Washington Township.

- Over the past two decades, about half of Washington Township's residentially developed acreage has been of the multi-family, or medium density, variety.
 - Of Washington Township's roughly 3000 acres of residential development since 1973, just over one-half was Medium and High Density, or multifamily, development. This nearly tripled the number of acres of multifamily development in the township, with most of the new multi-family development occurring in the northern half of the township.
 - Even with Washington Township's multi-family residential acreage increasing significantly since 1973, over half of the township's land remains developed for Very Low and Low Density Residential uses. The Very Low Density Residential land use category refers to large lot single family development, while the Low Density category refers to smaller lot single family and two-family development. Since 1973, most of the Very Low and Low Density Residential development has occurred in northwestern Washington Township.

Comprehensive Plan Response - The Washington Township Comprehensive Plan incorporates the recommendations of various neighborhood and other subarea plans, which promote the stability of existing residential areas (see Map 4). In many residential areas not covered by subarea plans, Office Buffer and Medium Density Residential uses have been recommended as transitional areas to protect single-family residential uses from converting to more intense uses.

- While relatively little land is used for industrial purposes, commercial uses have nearly doubled their acreage.
 - Over the past two decades, land used for office and retail commercial purposes increased in Washington Township by over 130%. The northeastern quadrant of the township was the location for about three-quarters of this commercial development.

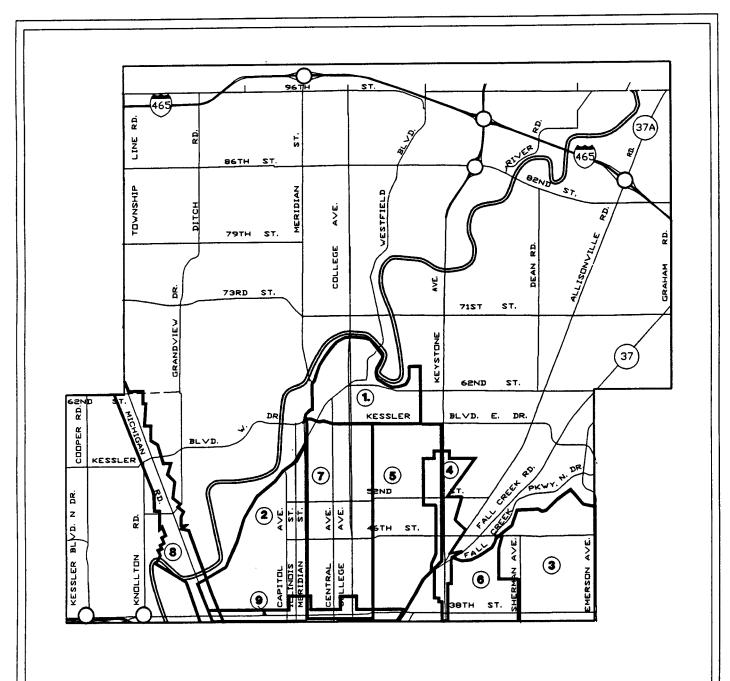
- Office commercial land use has increased by over 500% since 1973, a faster rate of increase than any other land use in Washington Township. The acreage used for offices has grown from 86 acres in 1973 to well over 500 acres. In addition, acreage now used for retail commercial purposes is approximately double the 1973 acreage total.
- Most of Washington Township's industrial development is located in the eastern half of the township. Less than 1% of the township's land is used for industry, compared to about 2% in Lawrence Township. In contrast, industrial development comprises about 7% of Pike Township. Of the remainder of Marion County townships, only Decatur and Franklin Townships have less than 4% of their acreage used for industry.
- Commercial and industrial uses combined occupy almost 6% of the land in Washington Township. By comparison, commercial and industrial uses occupy over 12% of all land in Pike Township, over 10% in Lawrence Township, and about 40% in Center Township.

Comprehensive Plan Response - In the revised plan, future office uses are sometimes recommended where the 1984 plan recommended commercial uses but could not specify whether the recommendation was for retail or office use. In the developing northeastern quadrant of the township, new commercial uses were recommended where they would not negatively impact nearby residential areas and where roadway capacity would be sufficient to handle the increased traffic. New commercial development is recommended at some intersections of arterial roadways in areas where commercial uses will have the least negative impact on existing residential areas. Commercial uses should not extend out along roadways into developed residential areas.

Township Planning and Development Goals

The Washington Township Planning Committee (see Appendix A) identified the following goal statements to be reflected in the Washington Township Comprehensive Plan revision:

- Protect remaining open spaces as much as possible, especially wetlands, woodlands, 1. and floodplain areas.
- 2. Preserve the stability and integrity of the Township's existing neighborhoods.
- 3. Preserve and protect existing low residential densities.
- 4. Provide for recreational uses in and along floodplain areas.
- 5. Reduce sign clutter along the Township's commercial corridors.



WASHINGTON TOWNSHIP SUBAREA PLAN BOUNDARIES

- 1. BROAD RIPPLE 1986
- 2. BUTLER TARKINGTON 1986
- 3. DEVINGTON 1992
- 4. KEYSTONE AVENUE CORRIDOR
- 5. KEYSTONE KESSLER 1985
- 6. MEADOWS FALL CREEK
- 7. MERIDIAN KESSLER 1978
- 8. MICHIGAN ROAD CORRIDOR PLAN 1988
- 9. 38TH STREET CORRIDOR 1985

THE PREPARATION OF THIS MAP WAS FINANCED IN PART BY A COMMUNITY DEVELOPMENT BLOCK GRANT



- 6. Limit the conversion of residential units to commercial uses by allowing only home occupations as strictly permitted and controlled by the Dwelling Districts Zoning Ordinance.
- 7. Coordinate the Township Plan's open space and recreation area recommendations for the White River corridor with those of the Indianapolis Metropolitan Greenways Plan.
- 8. Educate Metropolitan Development Commission members and Variance Board members about the expectation that zoning and variance decisions be made in conformance with the recommendations of the Comprehensive Plan. Similarly, instruct such decision makers to strictly interpret and adhere to the recommendations of the plan.
- 9. Discourage strip commercialization of residential corridors, and encourage reuse and reinvestment in existing commercial areas instead.
- 10. Enforce strict land use and zoning policies to protect the community from harmful string commercial development and unplanned isolated retail uses.
- 11. Achieve the best aesthetic quality from all development, new and existing, with special attention given to commercial areas.
- 12. Develop and maintain land use patterns that provide for livability and environmental quality throughout the community.

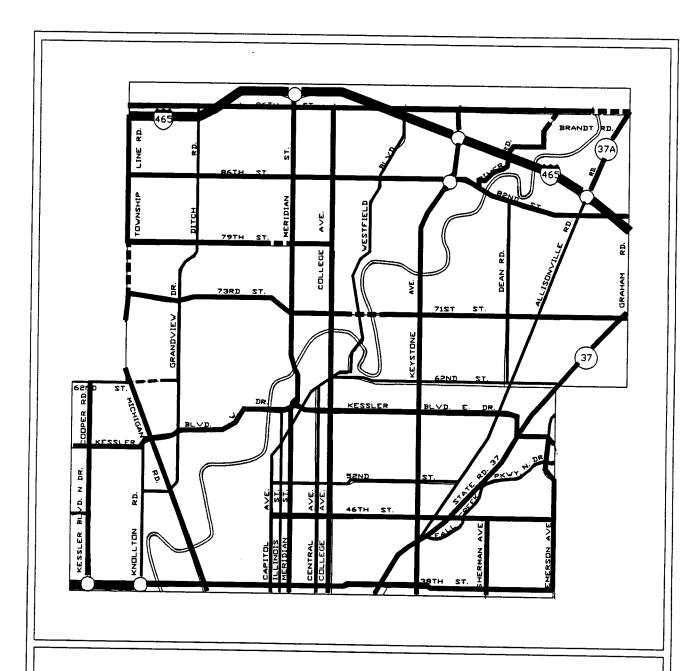
Thoroughfare Plan

Washington Township is included in the Marion County Thoroughfare Plan. The Thoroughfare Plan recommends roadway improvements designed to mitigate congestion and delays, which are measures of the roadway system's efficiency (see Map 5). In addition, the Thoroughfare Plan includes recommendations for right-of-way preservation. The Thoroughfare Plan assigns each recommended improvement a priority rating indicating when the work should occur. Priority ratings range from "A" (highest priority) to "D" (lowest priority). The actual timing of implementation of the plan's recommendations is a function of available funding and the priority schedule for improvements throughout Marion County. The Thoroughfare Plan is periodically revised, and the 1993 revision process is currently underway.

To increase efficiency of Washington Township's roadways and prevent their reaching or exceeding capacity in the future, the Thoroughfare Plan recommends a number of priority improvements. The Washington Township land use recommendations are based in part on these Thoroughfare Plan priority improvements and also on the levels-of-service of Washington Township's roadways. A list of the priority improvements begins on page 14.

- 1. Widening of Kessler Boulevard West Drive from two lanes to four lanes between Michigan Road and Spring Mill Road (Priority A).
- 2. Widening of Kessler Boulevard East Drive from two lanes to four lanes between Central Avenue and Compton Street (Priority A).
- 3. Widening of Keystone Avenue from four lanes to six lanes between 96th Street and 65th Street (Priority A).
- 4. Widening of Michigan Road from two lanes to four lanes between Westlane Road and Kessler Boulevard (Priority A).
- 5. Widening of Michigan Road from two lanes to four lanes between Cold Springs Road and 38th Street (Priority A).
- 6. Widening of 38th Street from four lanes to six lanes between Kessler Boulevard and Dr. Martin Luther King Jr. Street (Priority A).
- 7. Widening of 82nd street from four lanes to six lanes between Allisonville Road and I-69 (Priority A).
- 8. Widening of 86th Street from two lanes to a four-lane divided roadway between Township Line Road and Ditch Road (Priority B).
- 9. Widening of Keystone Avenue from four lanes to a four-lane divided roadway between Fall Creek Parkway North Drive and 38th Street (Priority B).
- 10. Widening of Michigan Road from two lanes to four lanes between Kessler Boulevard and Cold Springs Road (Priority B).
- 11. Widening of 38th Street from four lanes to six lanes between Sutherland Avenue and Sherman Drive (Priority B).
- 12. Widening of 38th Street from four lanes to a four-lane divided roadway between Sherman Drive and Emerson Avenue (Priority B).
- 13. Widening of 73rd Street from two lanes to a four-lane divided roadway between Grandview Road and Spring Mill Road (Priority B).
- 14. Widening of Meridian Hills Boulevard (71st-73rd Street connector) from two lanes to a four-lane divided roadway between Holiday Drive and Meridian Street (Priority C).

- Widening of 71st Street from two lanes to a four-lane divided roadway 15. between Meridian Street and College Avenue (Priority C).
- 16. Widening of Emerson Way from two lanes to a four-lane divided roadway between Kessler Boulevard and Ladywood Drive (Priority C).
- 17. Reconstruction and realignment of Brandt Road from two lanes to a fourlane divided roadway between River Road and Gray Road (Priority D).
- 18. Construction of a four-lane primary arterial connector of Township Line Road between 79th Street and 73rd Street (Priority D).
- Widening of State Road 37 from four lanes to a six-lane divided roadway 19. between I-465 and 47th Street (Priority D).
- 20. Widening of College Avenue from a two-lane roadway to a four-lane divided roadway between 96th Street and 71st Street (Priority D).
- 21. Construction of a four-lane secondary arterial connector of 62nd Street between Michigan Road and Coburn Avenue (Priority D).
- 22. Construction of a four-lane secondary arterial connector of 79th Street between Spring Mill Road and Meridian Street (Priority D).
- 23. Construction of a four-lane secondary arterial connector roadway of 96th Street between River Road and Allisonville Road (Priority D).



MAP 5 WASHINGTON TOWNSHIP

PORTION OF THE OFFICIAL THOROUGHFARE PLAN MAP, 1993

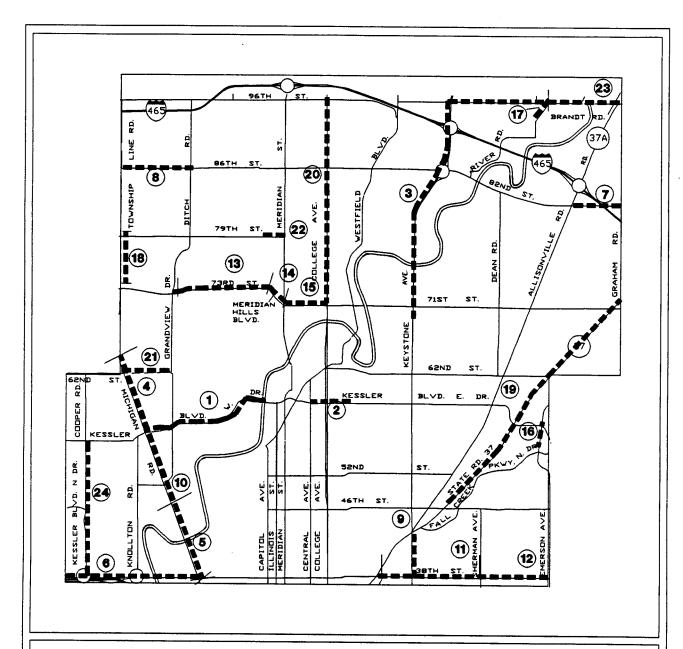
FREEWAY PRIMARY ARTERIAL SECONARY ARTERIAL





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MAP 6 **WASHINGTON TOWNSHIP** THOROUGHFARE PLAN PRIORITY IMPROVEMENTS

---PRIORITY IMPROVEMENTS

PRIORITY A

- 1 KESSLER BLVD. W. DR. WIDENING 2 KESSLER BLVD. E. DR. WIDENING
- 3 KEYSYONE AVE. WIDENING 4 MICHIGAN RD. WIDENING 5 MICHIGAN RD. WIDENING

- 6 38TH ST. WIDENING 7 82ND ST. WIDENING

PRIORITY B

- 86TH W. ST.WIDENING
- 9 KEYSTONE AVENUE WIDENING 10 MICHIGAN ROAD WIDENING
- 11 38TH STREET WIDENING
- 12 38TH STREET WIDENING 13 73RD STREET WIDENING

PRIORITY C

- 14 MERIDIAN HILLS BLVD. WIDENING
- 15 71 ST STREET WIDENING 16 EMERSION WAY WIDENING

24 KESSLER BLVD. N. DRIVE WIDENING 20 COLLEGE AVENUE WIDENING

PRIORITY D

- 17 BRANDT ROAD CONNECTOR 18 TOWNSHIP LINE RD CONNECTOR 19 STATE ROAD 37 WIDENING

- 21 62ND STREET CONNECTOR 22 79TH STREET CONNECTOR 23 96TH STRRET CONNECTOR

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"Level-of-service" is a measure of traffic congestion that rates roadways from A (least congested) through F (most congested). This measure identifies deficiencies in the roadway network. For example, a roadway segment with a level-of-service E or F is carrying more traffic than it is designed to carry.

The type and density of land use in an area determines the amount of traffic generated by that area. In turn, the amount of traffic generated affects roadway levels-of-service. Thus, the type and density of land use affects roadway levels-of-service. For example, traffic generated per acre of development is usually higher for commercial centers than for residential uses, and higher for multi-family residential uses than for single-family residential uses. In general, the more traffic generated by a land use, the greater the effect on roadway levels-of-service. The land uses recommended in this plan reflect existing and projected roadway levels-of-service. Therefore, deviations from this plan's land use recommendations will inevitably alter projected roadway levels-of-service.

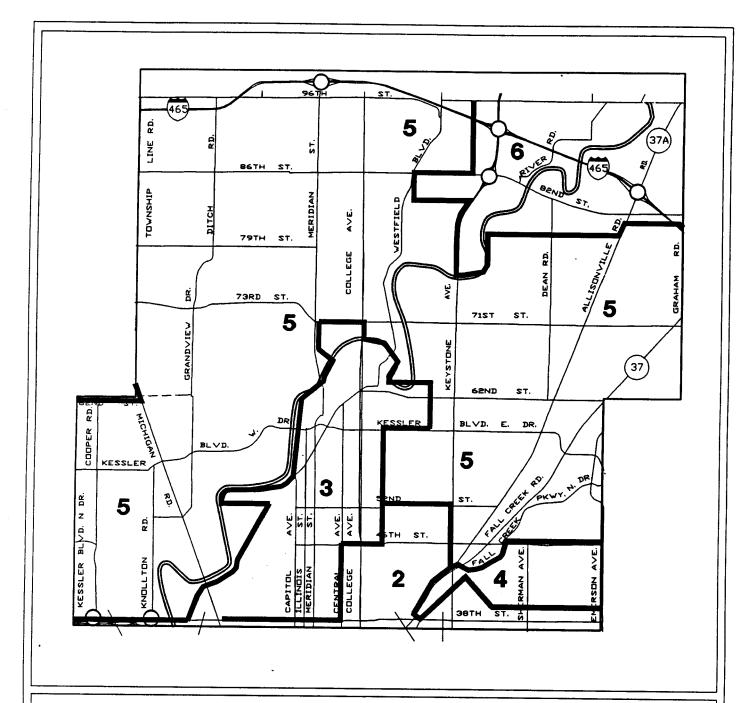
Stages of Development

The Comprehensive Plan for Marion County differentiates among various areas of the county by their history, rate of development, and pressure for growth--their stages of urban development. The countywide plan also explains all seven stages of development in detail. The Washington Township Comprehensive Plan identifies different areas of the township as being in Stages of Development 2, 3, 4, 5, and 6 (see Map 7). The location and abbreviated development policies for these stages are as follows:

- Stage 1 (Regional Center Area) and Stage 7 (Rural Area) are not present in Washington Township.
- Stage 2 (Center City Revitalization Area)

Washington Township's Stage 2 area is primarily east of the abandoned Monon Railway Corridor and extends as far north as 52nd Street. The Indiana State Fairgrounds and Indiana Deaf School mark the center of the Stage 2 area. A portion of the Urban Enterprise Zone is situated within the Stage 2 area. Properties located within the Urban Enterprise Zone are eligible for a variety of tax-based development and employment incentives. Although this Stage 2 land east of the State Fairgrounds is within the Urban Enterprise Zone boundary, little commercial or industrial redevelopment is evident.

Many residential, commercial, and industrial areas in Stage 2 are in need of revitalization. Disinvestment and deterioration of housing is common. Perhaps most notable is the Meadows area, where rehabilitation is needed for commercial retail and multi-family apartment buildings. Social services are also necessary for many Meadows area residents.



MAP 7 WASHINGTON TOWNSHIP STAGES OF DEVELOPMENT

- STAGE BOUNDARIES
- 2. CENTER CITY REVITALIZATION AREA
- 3. ESTABLISHED CENTER CITY AREA
- 4. SUBURBAN REVITALIZATION AREA
- 5. ESTABLISHED SUBURBAN AREA
- 6. DEVELOPING SUBURBAN AREA

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The Marion County Comprehensive Plan targets Stage 2 areas for public financial resources. In concert with this, the 1993-1995 Capital Improvements Program targets Washington Township's Stage 2 area for improvements by the Departments of Metropolitan Development, Parks and Recreation, Public Works, and Transportation. In addition, a new Indianapolis Fire Department station has been proposed for 42nd Street and College Avenue.

Neighborhood and corridor plans have been developed for much of the Stage 2 area (see Map 4, page 12). These plans encourage the revitalization of commercial areas and the strengthening of residential areas, as recommended in the Marion County Comprehensive Plan. These more detailed plans are incorporated into the Washington Township Comprehensive Plan. Neighborhood and corridor plans in Stage 2 include the Meadows-Fall Creek Neighborhood Plan (adopted in 1987), the Keystone-Kessler Neighborhood Plan (1985), the Keystone Avenue Corridor Study (1986), and the 38th Street Corridor Study (1985).

Stage 3 (Established Center City Area)

Washington Township's Stage 3 development is concentrated in the south central portion of the township, with White River acting as its main western boundary. This area is best known for its long-established urban neighborhoods, including Meridian-Kessler, Butler-Tarkington, and Broad Ripple. In addition, small commercial clusters, notably along Illinois Street and College Avenue, serve the residents of the area. The largest concentration of commercial and office uses within the Stage 3 area is in Broad Ripple.

The Marion County Comprehensive Plan states that it is a policy to protect the Stage 3 housing stock and nonresidential structures "from the encroachment of incompatible land uses and adverse environmental influences" in order to protect public and private investments. To implement this policy, the 1993 revision of the Washington Township Comprehensive Plan incorporates the recommendations of the more detailed neighborhood plans completed since the 1984 Comprehensive Plan. These plans include the 38th Street Corridor Plan (1985), the Butler-Tarkington Neighborhood Plan (1985), and the Broad Ripple Village Neighborhood Plan (1986). The 1978 Meridian-Kessler Neighborhood Plan should be considered for revision by the Department of Metropolitan Development.

The Marion County Comprehensive Plan also calls for "improved public services" in Stage 3. Transportation, public works, and park improvements top the 1993-1995 Capital Improvement Program project list for this area. In addition, the Army Corps of Engineers has initiated a study of the White River levees along the northern and western edges of the Stage 3 area. A linear park should be developed on the abandoned Monon Railway Corridor. Moreover, the Indianapolis Water Company Canal should continue to be reserved for recreational purposes.

Stage 4 (Suburban Revitalization Area)

Stage of Development 4 is found only in the far southeastern corner of Washington Township, primarily south of 46th Street and east of the Meadows area. For the most part, Stage 4 boundary lines between land uses are well defined. Most homes in these subdivisions are not impacted by nearby commercial uses, except by some traffic congestion. Commercial uses are located on arterial roadways and residential uses are primarily on collector or local streets. A portion of the Urban Enterprise Zone is situated within the Stage 4 area. Properties located within the Urban Enterprise Zone are eligible for a variety of tax-based development and employment incentives.

Except for commercial uses on 38th Street, residential uses make up most of the Stage 4 area. This area is almost entirely developed and a few areas reflect the poor building standards associated with the post-World War II pressure for meeting high short-term demand for housing. Individual properties may show signs of deterioration, but disinvestment is not as widespread as in the Stage 2 area.

Improving public services is a goal for Stage 4 areas, where several capital improvement projects are scheduled. The Departments of Public Works and Transportation both have projects scheduled for this area between 1993 and 1995. City sanitary sewers and water service are provided in most of the Stage 4 area, except south of 46th Street and north of 42nd Street between Sherman and Emerson Avenues.

Stage 5 (Established Suburban Area)

Except for the Stages of Development mentioned above and the far northeastern corner of Washington Township, the rest of the township is within Stage 5 Development. The Metropolitan School District of Washington Township and the Marion County Sheriff's Department primarily serve Stage 5. Most of Stage 5 land was developed after 1950, and boundary lines between major land uses are generally well defined.

Stage 5 areas are still experiencing some development pressure, particularly regular neighborhood reinvestment and property redevelopment. However, because various intensities of development are occurring on an infill basis, protecting existing land use patterns is a priority objective. Commercial uses should not be allowed to develop in residential areas or in other areas not recommended for commercial uses in the Comprehensive Plan. Major arterial corridors such as Allisonville Road and 86th Street are especially susceptible, and should be closely monitored.

Commercial and industrial development should also employ careful site design and be integrated with existing or proposed adjacent development. Site development,

especially for commercial uses, should be integrated and should buffer nearby residential uses and allow for vehicular and pedestrian access between adjacent developments. Such site planning decreases the need to use the public roadway system for travel between neighboring sites.

Washington Township's Stage 5 area contains the largest existing concentration of Very Low Density Residential development in Marion County. Many of the homes in Stage 5 are not served by City water, sanitary sewers, or storm sewers. Significant public and private investment will be necessary to establish these services in Stage 5 neighborhoods. The 1993-1995 Capital Improvement Program calls for numerous public works and transportation projects in Stage 5. These projects include roadway, sewer, drainage, and bridge improvements.

Environmentally sensitive areas, such as the recommended parks and Urban Conservation areas along White River, Crooked Creek, and Williams Creek, should be protected from inappropriate land uses and development intensities that might degrade the township's increasingly scarce natural features. Stage 5 areas are underserved by Neighborhood and Community Parks. Therefore, public parks are recommended for those few undeveloped areas where acquisition is most feasible and the greatest number of underserved township residents can enjoy park use in the future. A linear park should be developed on the abandoned Monon Railway Corridor.

Stage 6 (Developing Suburban Area)

Stage 6 in Washington Township is almost entirely east of Keystone Avenue and north of 79th Street. In this stage, undeveloped transitional areas between major land uses are at critical junctures because of recent or ongoing development of adjacent land. The undeveloped areas have experienced and will continue to experience development pressure, both for appropriate and inappropriate uses.

Two I-465 interchanges are within Stage 6, as is Keystone at the Crossing. White River winds through the center of the area. Stage 6 is currently experiencing some of the greatest commercial development pressure in Washington Township, especially on 82nd Street between Keystone Avenue and Allisonville Road. In addition, construction of the proposed 96th Street bridge over White River will have a profound effect on the development of the area south of 96th Street and west of White River.

The Stage 6 area of Washington Township has no public parks. With full development possible in Washington Township by early in the next century, the opportunity for obtaining park land will probably never be better than at present. The Comprehensive Plan recommends a large area for a park west of White River and north of I-465 to help address the shortage of park land. A park at this location also provides a major "anchor" or destination node connected to the proposed White River

Greenway. It also would link up with proposed recreational uses of the river corridor in Hamilton County to the north.

New development in Stage 6 should occur as recommended in the Comprehensive Plan, with careful consideration of maintaining sufficient roadway capacity as well as other public infrastructure capacity. Several transportation and public works improvements are planned for the Stage 6 area in the Capital Improvement Program for 1993-1995. The plan takes these and other proposed improvements into account. New commercial uses should be carefully developed in terms of their location proximate to existing residential areas and to roadways and other infrastructure.

Commercial and industrial development should also employ careful site design and be integrated with existing or proposed adjacent development. Site development, especially for commercial uses, should be integrated and should buffer nearby residential uses and allow for vehicular and pedestrian access between adjacent developments. Such site planning decreases the need to use the public roadway system for travel between sites. Moreover, new development should provide or make commitments for the provision of expanded public facilities to serve the new growth. As development of Washington Township's Stage 6 land continues, attention to these policies will encourage rational growth and not overburden the City's infrastructure.

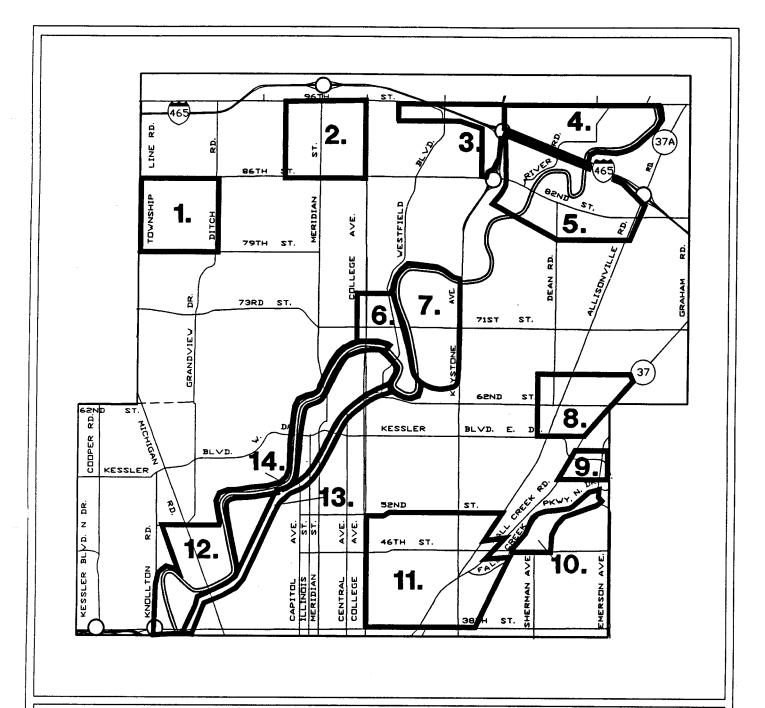
Critical Areas

Some land use recommendations in Washington Township warrant special emphasis because of factors related to their location, unusual character, and significant development potential. It is essential to the Washington Township Comprehensive Plan that these "critical areas" be developed as recommended. The plan's land use recommendations for the remainder of the township are also important; but critical areas warrant a more detailed explanation.

The list of critical areas can only be expanded by the adoption of a new critical area as a Comprehensive Plan Segment. This process involves further study of an area by the Department of Metropolitan Development, which may then recommend an area to the Metropolitan Development Commission for adoption as a Comprehensive Plan Segment.

On the following pages are Washington Township's critical areas, including a description and map of each, the rationale for why it is designated "critical" to the plan, recommendations for development, and additional data. Floodplains, wetlands, proposed Thoroughfare Plan roadway improvements, and other features are also shown on the individual critical area maps. Map 8 shows the locations of the critical areas in Washington Township.

Like the rest of this narrative, the critical areas section is best understood when read in conjunction with the Marion County Comprehensive Plan Narrative, the Washington Township Comprehensive Land Use Plan Map, and the 1991 Official Thoroughfare Plan for Marion County. Land use categories, indexing, and policies for development are more fully explained in the Marion County Comprehensive Plan Narrative. Likewise, the 1991 Official Thoroughfare Plan contains more detailed information regarding roadways in Marion County. Consult these plans when using this Washington Township narrative.



MAP 8 WASHINGTON TOWNSHIP CRITICAL AREAS

CRITICAL AREAS BOUNDARIES

THE PREPARATION OF THIS MAP WAS FINANCED IN PART BY A COMMUNITY DEVELOPMENT BLOCK GRANT



Critical Area 1

- Location (see Map 9): South of 86th Street, west of Ditch Road, north of 79th Street, and east of Township Line Road (approximately 640 acres).
- Land Use Plan Recommendations: St. Vincent Hospital, Office Center (OC), Office Buffer (OB), Neighborhood Shopping Center (NSC), Medium Density Residential (MD), Low Density Residential (LD), Neighborhood Park (Proposed) indexed to Low Density Residential [NP(P)(2)].
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Neighborhood Shopping Center - NSC

Office Buffer - OB

Medium Density Residential - MD Very Low Density Residential - VLD

East: Neighborhood Shopping Cluster - NSC

Medium Density Residential - MD Very Low Density Residential - VLD

South: Low Density Residential - LD

Very Low Density Residential - VLD

West: Office Center - OC

Medium Density - MD Office Buffer - OB

Low Density Residential - LD

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: The area around St. Vincent Hospital, although mostly developed, still has pockets of undeveloped land, including a wooded area. Some of this undeveloped land should be reserved to accommodate future hospital expansion needs. Another issue is that hospital-related uses are adjacent to existing residential neighborhoods.

Potential retail, multi-family, and park uses also make this area critical. Increased retail development of vacant land could exacerbate traffic problems on 86th Street. Much of the southern part of this critical area is developed and/or planned for Medium Density Residential use. Because the residents of this southern section are

Indexing is a method of numerically assigning a secondary land use recommendation to an area. On the Washington Township Comprehensive Plan map the indexed land use is shown in parentheses next to the primary land use recommendation. For further explanation of the indexing concept, please refer to the Marion County Comprehensive Plan narrative, pages 12-13.

currently unserved by parks, a Neighborhood Park is recommended at 8100 Ditch Road.

Recommendations:

- a. Preserve undeveloped land adjacent to St. Vincent Hospital for future hospital expansion. Future hospital-related uses should be developed to be compatible with the existing nearby residential neighborhoods.
- b. Preserve woodlands immediately south of St. Vincent Hospital to the greatest extent possible. Any future development in this area should include a tree preservation plan.
- c. Develop a Neighborhood Park at 8100 Ditch Road. This is the best location for a park in northwestern Washington Township, because of the scarcity of undeveloped land and the large population living in the apartment developments west of the site. The Metropolitan School District of Washington Township owns this land, but could sell or lease it to the Department of Parks and Recreation.
- d. Provide access to the proposed park from multi-family areas to the west. If 8100 Ditch Road is developed as a park, access should be provided for residents to walk or bicycle from the multi-family communities immediately west of the park. Prior to development, the Department of Parks and Recreation should investigate with the property owners an arrangement for an all-weather bicycle/walking path to the park. In addition, sidewalks will be necessary along Ditch Road between 79th and 86th Streets to improve access to the proposed park.
- e. Confine retail commercial use along West 86th Street to that area close to the Ditch Road intersection. At the intersection of 86th Street and Township Line Road, future retail commercial uses should be confined to the north side of 86th Street and west of the intersection. Retail uses generate high volumes of traffic, and should not be permitted to extend farther outward from these two shopping areas along 86th Street. The hospital entrances at Harcourt Road and Naab Road need to be kept free of the congestion associated with retail commercial land uses. Also, properties near the two 86th Street entrances into the North Willow Farms Subdivision warrant less intense uses on sites adjoining them. Office Buffer uses are recommended for both areas to soften the impact of the Greenbriar and Township Line Road commercial centers on the North Willow subdivision.

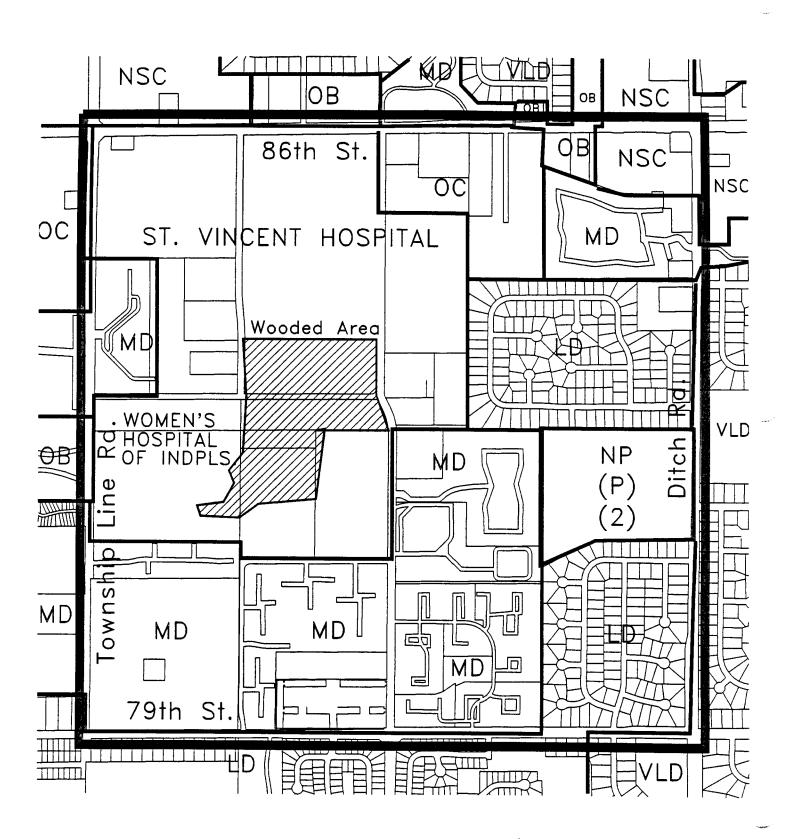
Additional Data:

- a. Soil Limitations Soil types found in Critical Area 1 include Crosby, Brookston, and Miami. Crosby and Brookston soils severely limit development because of their characteristic wetness. The Miami soils present only slight to moderate limitations due to their shrink-swell characteristics. Good drainage systems and appropriate construction materials and techniques must be used to overcome these limitations.
- b. Drainage Drainage problems are associated with the area and its Miami, Brookston, and Crosby soils. Development proposals must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- C. Environmental Constraints Two wooded areas are situated on either side of Dugan Drive between Naab Road and Harcourt Road immediately south of St. Vincent's Hospital. The northernmost area is approximately 16 acres in size, while the other is roughly nine acres. The hospital has developed a fitness trail on the larger more proximate site. These two areas represent the last opportunity for significant tree preservation to occur in this part of Washington Township. Great care should be taken whenever the hospital decides to develop any part of either woodland area to make sure as much of these woodlands are protected as possible.
- d. Sanitary Sewers Sanitary sewer service is available in all of Critical Area 1. The area's predominant soil type is rated severe for the use of septic systems. New development should provide sanitary sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Existing development should acquire sewers through the Barrett Law or other procedures. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Water service is available throughout Critical Area 1.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that Township Line Road be extended southward from 79th Street to Westlane Road as a primary arterial roadway. In addition, the plan recommends that 86th Street be widened to a four-lane primary arterial from Michigan Road to Ditch Road. This section of 86th Street is currently under construction. These are the only priority improvement recommendations in the Thoroughfare Plan for Critical Area 1. Ditch Road and 79th Street are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be

preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Map 9, next page)

Map 9 - Critical Area 1



Critical Area 2

- Location (see Map 10): South of 96th Street, west of College Avenue, north of a line running parallel and 200 feet south of 86th Street, and east of Spring Mill Road (approximately 690 acres).
- Land Use Plan Recommendation: Very Low Density Residential (VLD), Medium Density Residential (MD), Neighborhood Shopping Center (NSC), Low Density Residential (LD), Office Buffer (OB), Community Park indexed to Very Low Density Residential [CP(P)(1)].
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Recommendations of the 1991 Comprehensive Plan Update of the City of

Carmel/Clay Township are as follows:

Medium Density Residential (2-4 dwelling units/acre)

Regional Commercial/Office Local Commercial/Office

Higher Density Residential (apartments, duplexes, and townhouses)

Public/Semi-Public

East: Low Density Residential - LD

Medium Density Residential - MD Very Low Density Residential - VLD

Office Buffer - OB

South: Low Density Residential - LD

Very Low Density Residential - VLD

West: Very Low Density Residential - VLD

Low Density Residential - LD

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: Several undeveloped areas planned for residential use will continue to experience pressure for commercial and higher density residential development, which would be detrimental to existing neighborhoods. These undeveloped areas include sites at the 86th Street and Meridian Street intersection and at 9301 Spring Mill Road. Existing residential structures on 86th Street will experience pressure for commercial use, despite land use recommendations for continued residential use. In addition, wooded areas and potential park land should be preserved.

Recommendations:

- a. Prohibit new commercial development on 86th Street between College Avenue and Meridian Street, especially at the intersection of 86th and Meridian Streets. Residents on and near 86th Street should not be subject to additional traffic problems that would result from new commercial development or the conversion of existing residential structures to commercial uses. Commercial activity along 86th Street should be restricted to established nodes at Nora and Greenbriar (west of the critical area at Ditch Road). Infill sites along 86th Street should be developed residentially per the recommendations in the Washington Township Comprehensive Land Use Plan Map. The residential land use pattern which exists along the corridor between those commercial nodes should be preserved and the integrity of the neighborhoods maintained.
- b. Limit commercial development to the Meridian Street office corridor that stretches north approximately from 88th Street to 91st Street. Adjacent to this corridor are existing and planned residential areas. No additional commercial uses should be developed on 91st Street or 86th Street.
- c. Develop the southwest corner of 91st Street and College Avenue as a Community Park. This property is adjacent to a concentrated multi-family area that is unserved by park facilities. The Metropolitan School District of Washington Township owns this land, but could sell or lease it to the Department of Parks and Recreation.
- d. Discuss with City of Carmel officials their plan's Regional Commercial/Office recommendation for the area north of Belle Meade Manor subdivision. The high-intensity commercial uses encouraged by this recommendation are not appropriate across 96th Street from a single-family subdivision. Alternative plan recommendations which respect the low density residential character of this area should be discussed and perhaps adopted as part of an inter-county zoning agreement. (Similar circumstances surround an area in Critical Area 3, pages 35-39, where an existing single-family development in Hamilton County lies across 96th Street from vacant land fronting I-465 in Marion County.)

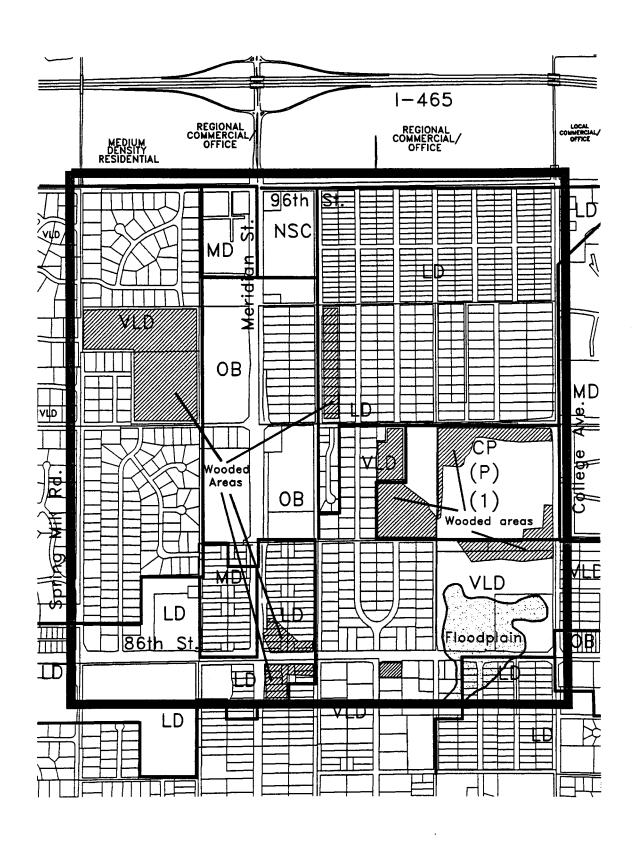
Additional Data:

a. Soil Limitations - Soil types found in Critical Area 2 include Crosby, Brookston, and Miami. Crosby and Brookston soils severely limit development because of their characteristic wetness. The Miami soils present only slight to moderate limitations due to their shrink-swell characteristics. Good drainage systems and appropriate construction materials and techniques must be used to overcome these limitations.

- Drainage Drainage problems are associated with the site and its Miami, b. Brookston, and Crosby soils. Potential development must be accompanied by a thorough analysis of on-site and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- Environmental Constraints Woodlands are located within four undeveloped c. sites in this critical area: roughly 250 West 91st Street, 100 east 91st Street, approximately 600 East 91st Street, and at the intersection of Meridian Street and 86th Street. Tree preservation should take place at all four sites. The 600 East 91st Street site is recommended for Community Park (CP) use, and any improvement of the site to accommodate recreational uses should not involve the wooded area. Rather, the remaining woodlands should be left undisturbed and they should be used as a natural buffer. The wooded area around 86th Street and Meridian Street should be incorporated into a sensitive site design for residential uses.
- d. Sanitary Sewers - Sanitary sewer service is available in approximately threefourths of Critical Area 2. The southeastern quadrant is not presently connected to sewers, although the area's predominant soil type is rated severe for the use of septic systems. Sanitary sewer service should be extended into the unserved neighborhoods to prevent health hazards associated with soils' inability to accommodate septic systems. Existing development should acquire sewers through the Barrett Law or other financing mechanisms. Interested individuals should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- Water Facilities Much of Critical Area 2 is presently served by public e. water, although many homes continue to utilize private wells. Larger water mains exist along 91st and 96th Streets, as well as portions of 86th street. Future infill development could easily access public water by connecting to one of these mains.
- f. Transportation - The Official Thoroughfare Plan for Marion County recommends that College Avenue between 71st Street and 96th Street be upgraded to a four-lane primary arterial. This is the only Thoroughfare Plan priority improvement recommendation in Critical Area 2. Meridian Street is recommended for additional right-of-way preservation, but it is not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Map 10, next page)

Map 10 - Critical Area 2



Location (see Map 11): South of 96th Street and west of Keystone Avenue, on both sides of I-465 as far west as where it extends into Hamilton County, and including the area between Keystone Avenue and Haverstick Road north of 86th Street (approximately 250 acres).

Land Use Plan Recommendations: Very Low Density Residential (VLD), Low Density Residential (LD), Office Buffer (OB), and Commercial Cluster (CC).

Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Recommendations of the 1991 Comprehensive Plan Update of the City of

Carmel/Clay Township are as follows:

Higher Density Residential (apartments, duplexes, and townhouses)

Medium Density Residential (2-4 dwelling units/acre)

Local Commercial/Office

East: Keystone Avenue

Community Shopping Center - CSC

Office Center - OC

South: Very Low Density Residential - VLD

Commercial Cluster - CC

West: Very Low Density Residential - VLD

- Stages of Development: 5 (Established Suburban Area) and 6 (Developing Suburban Area).
- Why Critical: Although I-465 runs through Critical Area 3, its only interchange is at Keystone Avenue. Some commercial uses already exist west of Keystone Avenue near a partially developed single-family area. The presence of these single-family homes, a greater number of single-family homes north of 96th Street, and the limited traffic handling capacities of 96th Street and Westfield Road make the extension of commercial uses to the west inappropriate.

Traffic on 96th Street will likely increase steadily, yet this traffic is forced to cross I-465 using Westfield Road. The roadway alignment is not conducive to handling large traffic volumes.

If development along Haverstick Road is of greater intensity than what is recommended, traffic problems will worsen on Haverstick Road and 86th Street.

Recommendations:

- a. Discourage western expansion of commercial uses along 96th Street in this critical area. Currently, 96th Street is inadequate for accommodating commercial traffic, and the predominate use is residential. Single-family homes already exist in Hamilton County, along the north side of 96th Street, and they are recommended for much of the undeveloped land. From Westfield Road, east to Keystone Avenue, 96th Street is a narrow two-lane road. Through traffic must access Westfield Road, also a two-lane road, to cross I-465. Allowing commercial development to extend westward along 96th Street would worsen traffic problems, increase the presence of air and noise pollution, and would negatively impact the area's existing single-family homes.
- b. All future development should be accompanied by the extension of sanitary sewers. Most of the existing homes use wells and septic systems, a combination which often leads to unhealthy drinking water conditions. These homes should convert to public sewer and water services. More development of homes with septic systems could further endanger the drinking water supply.
- c. Buffer existing and proposed residential uses east of Westfield Road and north of I-465 from the commercial uses at 96th Street and Keystone Avenue. Uses that are developed in the Office Buffer area should be relatively low intensity, having minimal impact on the residential area recommended to the west. Part of the area recommended for Office Buffer is zoned C-1 for offices uses, while the remainder is currently zoned C-S, allowing office and mini-warehouse uses. Commercial uses other than office use may be acceptable in this area as long as they do not adversely impact the residences to the west. All commercial buildings developed within the recommended Office Buffer area should be residential in scale and appearance, with generous yards and perimeter landscaping.
- d. Maintain contact with the City of Carmel regarding their study of 96th Street. The City of Carmel currently is studying the extension of 96th Street in a straightened alignment across I-465 at Westfield Road. If this project were to be undertaken, it could have a profound effect on the land use plans north and south of 96th Street in this area. In the event of 96th Street being extended, a special land use study should be conducted for the affected area.
- e. Develop the vacant 20-acre site at approximately 9350 Westfield Road for Low Density Residential use. The site should be subdivided in a cluster fashion, employing generous setbacks from Real Street. Only single-family homes on compatibly scaled lots should be located along the development's western and southern perimeters. Any development of this site should

- include the installation of sidewalks, both within the subdivision and along Real Street and 96th Street.
- f. Develop the vacant land at roughly 9001 Haverstick Road residentially, with housing densities and designs that complement the adjoining single-family residential neighborhood to the west. Consequently, single-family homes on compatibly scaled lots should be located along the development's western and southern perimeters. The site also fronts on Keystone Avenue to the east, and it is traversed by electrical power transmission lines. Either a planned unit development (PUD) or a cluster subdivision should occur on this site to preserve trees and to maximize the distances between residences and the power lines. A PUD would also allow for a variety of housing types and densities within a single development.

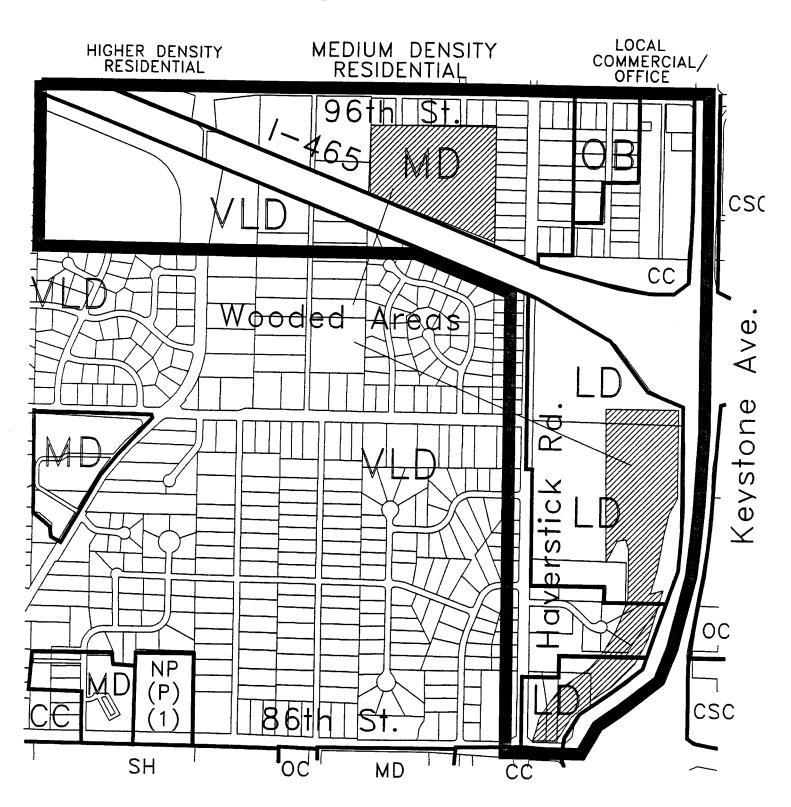
- Soil Limitations The area is composed primarily of Miami soils, a. interspersed with pockets of Crosby soil. Crosby soil, due to its characteristic wetness, severely limits the suitability of a site for development. Miami soil is less restrictive for general development, although it too severely restricts the effectiveness of septic sewer systems.
- b. Drainage - Drainage problems are associated with the areas containing Crosby soil in this critical area. Infill development will have to provide stormwater detention facilities to prevent impacting adjacent properties with runoff. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints - A tree preservation plan should be prepared and used to save the wooded area along the eastern and southern edges of the vacant site at approximately 9001 Haverstick Road. Additionally, because that site is bisected by high power transmission lines, the clustered subdivision option should be employed to maximize that distance between residential structures and the power lines.
- Sanitary Sewers Most of Critical Area 3 is not presently served by sanitary d. sewers. Service areas exist east of Keystone Avenue and south of 86th Street. With respect to the portion of the critical area west of Westfield Road, the adjoining developed subdivision of Sherwood Forest has recently been retrofitted with sanitary sewer service through the Barrett Law. Therefore, the southwest corner of the critical area would likely have sewer access available nearby. New development should provide sewer service, and presently unsewered subdivisions should be retrofitted with sanitary

sewers to prevent health hazards associated with soils' inability to accommodate septic systems. Interested residents and developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.

- e. Water Facilities Water service is available in the northeast corner of the critical area. A water line extends westward from Keystone Avenue to Whitley Drive. West of the critical area, water lines extend eastward along both 91st Street and 96th Street, ending in each case at the old Monon right-of-way. From the south, a line extends northward along Westfield Road up to Nottingham Drive in the Sherwood Forest subdivision. Water is also available along East 86th Street.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that Keystone Avenue be widened to a six-lane primary arterial roadway, from 96th Street to 86th Street, which is currently under construction. This is the only priority improvement recommendation that the Thoroughfare Plan makes for Critical Area 3. Westfield Road and 96th Street are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Map 11, next page)

Map 11 - Critical Area 3



- Location (see Map 12): South of 96th Street from Keystone Avenue to White River (approximately 800 acres).
- Land Use Plan Recommendations: Community Shopping Center (CSC), Office Center (OC), Office Buffer (OB), Urban Conservation indexed in part to High Density Residential [UC and UC(4)], Neighborhood Shopping Center (NSC), Medium Density Residential (MD), Community Park (Proposed) [CP(P)], and Low Density Residential (LD).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Recommendations of the 1991 Comprehensive Plan Update of the City of

Carmel/Clay Township are as follows:

Local Commercial/Office Regional Commercial/Office

Public/Semi-Public

East: White River

Urban Conservation - UC

South: I-465

Office Center - OC

High Density Residential - HD Medium Density Residential - MD

Urban Conservation - UC

West: Commercial Cluster - CC

- Stage of Development: 6 (Developing Suburban Area).
- Why Critical: In Critical Area 4, which contains significant amounts of undeveloped land, a proposed 96th Street bridge over White River would intensify commercial development pressure on both sides of 96th Street. River Road, the only roadway crossing I-465 in this area, is not sufficient to carry large volumes of traffic, nor is it recommended as an arterial roadway in the Thoroughfare Plan. Established residential and office uses already exist in this area. Aggregate mining is now taking place adjacent to the river north of 96th Street, and reclamation of aggregate mines is occurring south of 96th Street. Significant floodway and wooded areas are found in this critical area, including land that is recommended for Community Park use in the future.

Recommendations:

- Participate in decision making on the proposed 96th Street/White River a. bridge project. The Department of Transportation, Department of Metropolitan Development, and other City departments should be represented during discussions and possible planning of the bridge project. Placement of a bridge would have a profound effect on Marion County, particularly the northeast corner of Washington Township. The 1991 City of Carmel/Clay Township Plan recommends commercial uses nearly the entire length of 96th Street from Keystone Avenue to White River. Combined with potential development south of 96th Street, this proposed commercial development west of the bridge over White River will affect land use, roadways, and other City services. A danger even may exist of overburdening the new bridge and roadway with traffic.
- b. Develop Critical Area 4 in accordance with the land uses recommended in the plan, especially in regard to residential and commercial retail use. Residential uses are already established in this area, and are recommended near the proposed Community Park. Overdevelopment of commercial retail uses, on the other hand, would create traffic congestion on an inadequate roadway system. Currently two-lane River Road is the only north-south road that crosses I-465 between Keystone Avenue and White River, and it is not designed to carry large volumes of traffic.

An abundance of commercial retail opportunities already exist in and near northeastern Washington Township. The Nora, Keystone at the Crossing, and Clearwater shopping areas--in addition to Castleton Square Mall--all serve northeastern Washington Township as well as Hamilton County's Clay and Delaware Townships. The Comprehensive Plan's recommendations for Critical Area 4 include commercial retail recommendations at the most appropriate locations on 96th Street: immediately adjacent to and east of Keystone Avenue, and at the intersection of Gray Road. Future commercial development along this stretch of 96th Street should be restricted to those locations.

Make the Gray Road intersection with 96th Street a four-way intersection in c. order to allow a smooth flow of north-south traffic. The Neighborhood Shopping Center recommendation is predicated on the assumption that its northwest corner will be at the corner of a four-way intersection. This could be accomplished either by realigning Brandt Road to meet Gray Road at 96th Street or by constructing a new road connecting Gray Road to River Road. The cost of realignment or construction of either road would most likely be borne by the developer of the recommended Neighborhood Shopping Center and the surrounding residential areas, particularly if done as a planned unit development.

- d. Develop a Community Park west of White River and east of River Road. The northeast corner of Washington Township is underserved by parks. Because the Community Park recommendation is in a floodway area, development for either residential or non-residential uses would be practically impossible and the cost of land should be relatively low. The Community Park area includes woodlands and would serve as an important connector for a possible future White River Greenway. With the residential uses recommended nearby and utilizing the 96th Street bridge as a pedestrian linkage to existing apartment developments, the park could serve a large population.
- e. Preserve the wooded areas. The wooded areas of Critical Area 4 are found in the recommended Community Park and Urban Conservation areas. Any sort of development of these areas should only occur if accompanied by a tree preservation plan that will ensure protection of the wooded area.
- f. Develop the undeveloped portion of this critical area between Brandt Road and White River as a planned unit development. The development should contain an appropriate mix of residential, office, and retail uses that together encourage a maximum of pedestrian travel and will not contribute unnecessarily to increased auto dependence and roadway congestion.

- a. Soil Limitations Soils found in this critical area include Fox, Genesee, and Miami. Fox and Miami soils present slight to moderate limitations to development. Genesee soil is prone to flooding and it is characterized by wetness. It severely limits the possibilities for shallow excavations, construction of buildings (with or without basements), roadways, and septic systems.
- b. Drainage Drainage problems are associated with the Genesee soil found in Critical Area 4. In addition, much of the critical area is in the White River floodway and floodplain. Potential development must be accompanied by a thorough analysis of on-site and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints This critical area is bounded on the east by White River. A Community Park is recommended for the broad floodway that parallels the river between 96th Street and I-465. Preservation of the stream bank's natural vegetation, including peripheral woodlands is crucial for maintaining the water quality and preventing erosion. It will also add value to the future community park.

Another significant natural feature in this area is an eighteen acre woodland area at the southeast corner of Brandt Road and 96th Street. This is the only remaining woodland in the critical area and as much of it as possible should be preserved. Neighborhood Shopping Center (NSC) and High Density Residential (HD) uses are recommended for the site via indexing. The intent is to encourage development of suburban mid-rise multi-family housing which would require a minimal amount of land area for the building areas. Ideally, parking structures would be incorporated into the design of the residential buildings so that surface parking areas are minimal as well. The buildings should be clustered, leaving the remainder of the site undisturbed as common area.

A number of small man-made lakes are located within this critical area. All are the result of aggregate mining activity. Some, such as the lake located in the center of the Precedent Business Park, have been reconfigured into aquatic amenities as part of a mining company's site reclamation and redevelopment efforts. Others lakes east of Brandt Road are currently in the process of being "reclaimed". As these water bodies are reshaped and filled, care should be taken to ensure that they receive only inert solid fill material.

- d. Sanitary Sewers Sanitary sewer service is available in most of Critical Area 4--between 96th Street and the interstate, and between Keystone Avenue and Brandt Road. A City of Indianapolis sanitary sewer interceptor runs southward, originating within this critical area. Existing development should acquire sewers through the Barrett Law or other procedures. New development should anticipate the necessity to connect to sanitary sewer. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Critical Area 4 has a larger water line extending east from Keystone Avenue along 96th Street, and then southward along Brandt Road. Water service is currently available within the area between 96th Street and the interstate, and between Keystone Avenue and Brandt Road.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that 96th Street be improved ultimately to a four-lane primary arterial roadway. It also recommends that it be extended across White River and linked with the 96th Street segment which currently terminates at Allisonville Road.

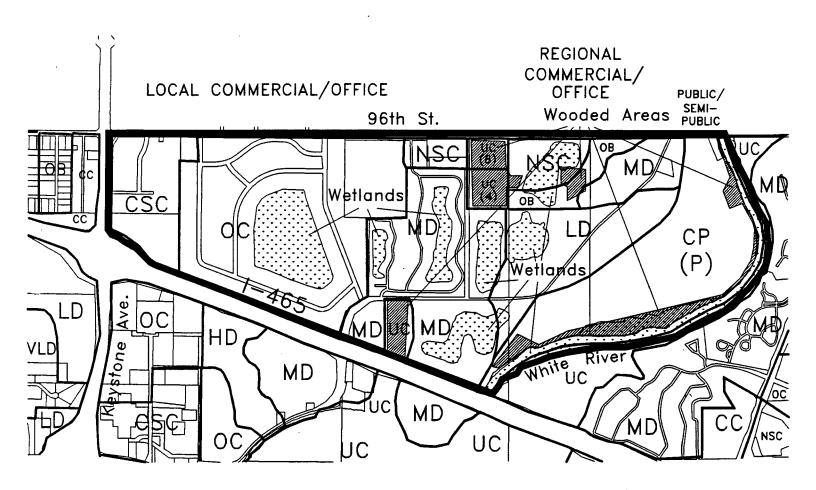
The Thoroughfare Plan recommends that River Road, Brandt Road, and Gray Road become a continuous secondary arterial roadway. This secondary arterial would traverse Critical Area 4 from the southwest to the northeast. To further streamline this roadway as a north-south arterial, the Thoroughfare Plan recommends that Brandt Road be realigned to intersect

with 96th Street opposite Gray Road (Hamilton County). These are the only Thoroughfare Plan priority improvement recommendations in Critical Area 4. Right-of-way should be preserved along appropriate roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

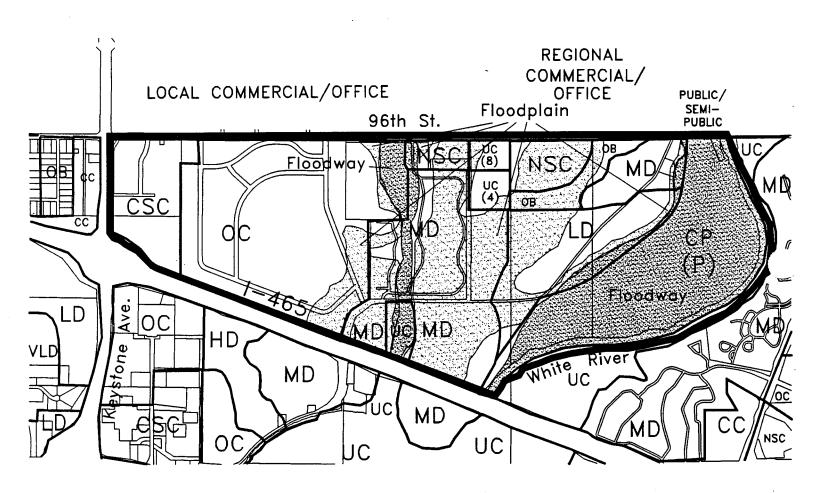
Any analysis to determine the optimal realignment of Brandt Road should consider the potential impacts of the realignment alternatives on the 18 acres of woodland discussed above under "Environmental Constraints."

(See Maps 12a and 12b, next two pages)

Map 12a - Critical Area 4, Wetland and Woodland Areas



Map 12b - Critical Area 4, Floodway and Floodplain Areas



- Location (see Map 13): South of I-465, west of Allisonville Road, north of 79th Street, and east of Union Chapel Road and Bazaar Drive (approximately 825 acres).
- Land Use Plan Recommendations: High Density Residential (HD), Medium Density Residential (MD), Office Center (OC), Community Shopping Center (CSC), Office Buffer (OB), Neighborhood Shopping Center (NSC), Low Density Residential (LD), Urban Conservation (UC) indexed in part to Low Density Residential [UC(2)] and to Very Low Density Residential [UC(1)].
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: I-465

East: Community Shopping Center - CSC

Office Buffer - OB

South: Low Density Residential - LD

Urban Conservation - UC

Medium Density Residential - MD Very Low Density Residential - VLD

West: Office Center - OC

> Community Shopping Center - CSC Medium Density Residential - MD Low Density Residential - LD

- Stages of Development: 5 (Established Suburban Area) and 6 (Developing Suburban Area).
- Why Critical: The 82nd Street corridor has experienced intense development pressure, especially for commercial land uses. The traffic generated by these commercial uses is in part responsible for the poor levels of service of 82nd Street and Dean Road. White River winds through this area, and numerous man-made lakes and wetlands also exist here. Existing single- and multi-family uses require protection from incompatible non-residential uses. This is especially true of the area now occupied by a privately owned golf course--an area that could be developed with more intense uses in the future.

Recommendations:

Prohibit outward expansion of commercial uses beyond what is recommended a. in the plan. The 82nd Street corridor between Keystone Avenue and Allisonville Road is experiencing heavy traffic congestion, due partly to the

recent development of commercial uses on both sides of 82nd Street near Dean Road. The area immediately east of White River north of 82nd Street, while recommended for Urban Conservation use in the 1984 Plan, was rezoned and is currently being developed entirely with commercial uses. Commercial uses should be tightly clustered at Dean Road and Allisonville Road intersections, rather than extended in strip development fashion along 82nd Street.

Staff and decision makers likely will continue to hear inquiries and petitions for commercial uses along 82nd Street, but these petitions should be denied in favor of lower intensity residential development that reflect the plan's recommendations. Developments which generate low absolute numbers of trips and which generate fewer peak hour trips are strongly encouraged.

b. Medium Density residential use is proposed west of the Allisonville Road/82nd Street intersection to buffer existing and recommended lower density residential land uses from more intense commercial uses to the east. The plan recommends a gradual decrease in land use intensity from this intersection westward, and from 82nd Street southward to the existing large-lot single-family residential neighborhoods in the southern part of Critical Area 5. The vacant land should be subdivided using the cluster option, employing generous setbacks from 82nd Street. Only single-family homes on compatibly scaled lots should be located along the development's southern perimeters.

Single-family uses should be well buffered from the commercial uses that have developed on the south side of 82nd Street near Dean Road. Low Density Residential uses should be positioned between Medium Density and Very Low Density Residential uses, as shown in the land use plan map.

These recommendations should be incorporated into any development proposals, including any for the existing golf course property. This is true as well for the Urban Conservation area indexed to Low and Very Low Density Residential uses. In the Urban Conservation area at the southern perimeter of the golf course, the existing woodlands should be protected.

- c. Set aside land along White River for the possible future White River Greenway. The Urban Conservation area that is not indexed is in the floodway, and thus is unsuitable for development. This area could serve as part of the potential White River Greenway, similar to the Community Park recommended to the north of I-465 (see Critical Area 4).
- d. Protect the natural features associated with White River. The lake and wetland near the ox-bow of White River should be protected from development, as should the wooded areas near the river. Any development

in this area should be accompanied by a tree preservation plan. In addition to tree preservation, new development bordering White River and its floodway should include heavy landscaping to buffer the natural river area from the development. Buildings should be smaller in scale and situated on the site in a manner that will not impinge on the natural landscape.

- Improve Dean Road as a two-lane roadway. Although Dean Road should e. remain two lanes, the lanes should be widened to allow safer travel.
- f. Maintain existing single-family homes along Allisonville Road south of 82nd Street as residential structures. Attempts to convert them to non-residential uses should be resisted.
- Protect levees along White River from potential adverse impacts of g. development. Development near the levee area should be closely scrutinized by the Department of Public Works, and should not be allowed if levee integrity is threatened.
- Protect adjacent property owners from immediate negative impacts of land h. development. In the past, developers in this area pumped water from the site in order to facilitate earthmoving. Concurrently, a number of nearby private residential wells ran dry or experienced a significant reduction in water quality. Potential development in this area should employ methods that will not endanger the water supply or water quality of nearby wells.

- Soil Limitations Critical Area 5 is made up of a wide variety of soils: a. Brookston, Crosby, Fox, Genesee, and Miami. Brookston, Crosby, and Genesee, soils severely limit development because of their characteristic flooding and wetness. Fox and Miami soils, on the other hand, present only slight to moderate limitations, mainly due to slopes. In Critical Area 5, sanitary sewers and appropriate site preparation and construction measures should be used to offset or mitigate the soils' limitations and help ensure the successful long-term development of the area
- b. Drainage - Drainage problems are associated with the Brookston, Crosby, and Genesee soils present in this critical area. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- Environmental Constraints In this area White River winds its way between c. several lakes, created earlier this century by aggregate mining operations. Consequently, a significant portion of Critical Area 5 is classified as either

wetland or floodplain. The river banks and lake shores are often wooded; significant woodland areas can also be found around the southern portion of Sycamore Springs Golf Course. Development in this area should utilize greater setbacks and more generous landscaping (retention of natural woodlands possibly) to effectively buffer these few remaining natural environments from human-generated noise, light, odors and physical impacts.

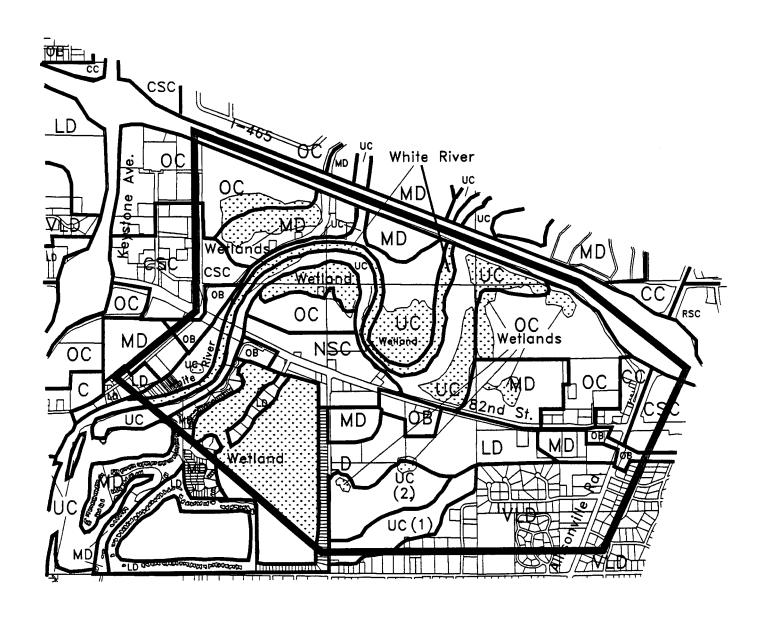
The woodland areas along White River and in the vicinity of the Golf Course should be protected. Where other constraints such as flood susceptibility or wetland designation do not prohibit development, clustered development patterns are encouraged to ensure the preservation of larger tree stands.

Groundwater continues to be tapped by many homeowners in the southern part of Critical Area 5. Any development which would require a significant amount of de-watering activity should take necessary precautions to ensure that no homeowners will lose well production capability.

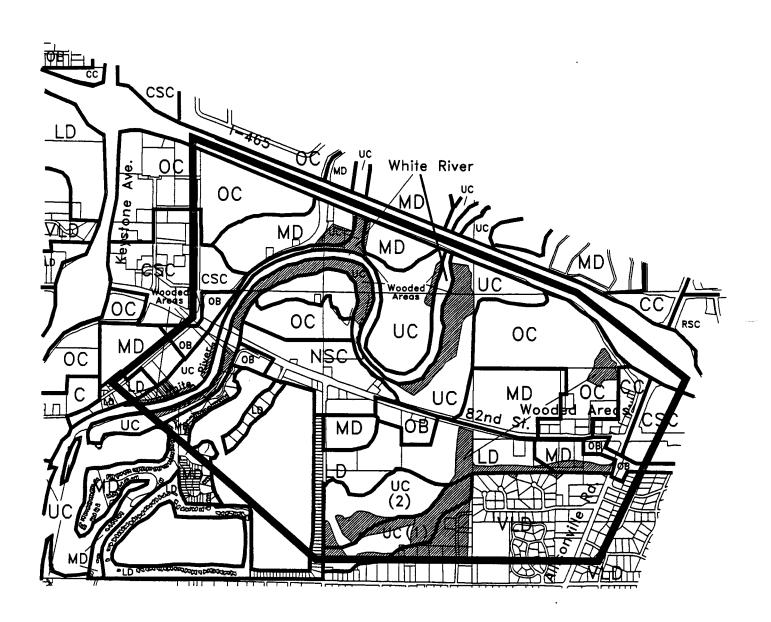
- d. Sanitary Sewers Sanitary sewer service is available in most of the developable portions of Critical Area 5. A City of Indianapolis sanitary sewer interceptor runs southward, west of the White River. Existing development should acquire sewers through the Barrett Law or other procedures. New development should provide sanitary sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Critical Area 5 currently has water service available along several arterial streets. West of White River, water is available along Union Chapel Road and 86th Street. East of White River, water is available in the critical area along East 82nd Street, Dean Road, Allisonville Road and portions of East 79th Street.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that 82nd Street between Allisonville Road and I-69 be improved from a four-lane primary arterial to a six-lane primary arterial. This is the only Thoroughfare Plan priority improvement in Critical Area 5. Allisonville Road, Dean Road and River Road are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Maps 13a and 13b, next two pages)

Map 13a - Critical Area 5, Wetland and Woodland Areas



Map 13b - Critical Area 5, Floodway and Floodplain Areas



- Location (see Map 14): North and west of White River, east of Broadway Street extended, and south of 75th Street (approximately 345 acres).
- Land Use Plan Recommendations: Neighborhood Park (Existing) [NP(E)], Linear Park (proposed) [LP(P)], Low Density Residential (LD), Private High School (PS), Urban Conservation indexed to Very Low Density Residential [UC (1)], and Medium Density Residential (MD).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Special Use - Indiana Blind School

Linear Park (Proposed) - LP(P) Urban Conservation - UC Low Density Residential - LD

East: Low Density Residential - LD

South: Community Park (Existing) - CP(E)

Office Buffer - OB

Senior High School - SH Commercial Cluster - CC Urban Conservation - UC Linear Park (Proposed) - LP(P)

West: Very Low Density Residential - VLD

> Private High School - PS Low Density Residential - LD Urban Conservation - UC

- Stages of Development: 5 (Established Suburban Area) and 6 (Developing Suburban Area).
- Why Critical: East-west travel across Washington Township is somewhat limited due to the lack of bridges spanning White River. The Thoroughfare Plan of Marion County recommends that 71st Street be extended across the river to improve east-west traffic movement. However, some of the Marrott Park property would have to be converted from park use to transportation use, thereby violating a deed restriction which prohibits any use other than park use. Legally, ownership of the park land could transfer back to the Marrott heirs, and the City would lose an important neighborhood park.

Although two bridges cross the river at the southern end of this area, both serve north-south arterial roadways: College Avenue and Westfield Boulevard. The nearest east-west arterials which cross White River are 86th/82nd Street and Kessler Boulevard, which are about three miles apart. At the township's southern extreme, 38th Street provides the only other east-west alternative over the river. Consequently, east-west travel options are quite limited. On the other hand, the central portion of Washington Township is nearly completely developed, and demand for east-west travel alternatives will probably not increase much in this area.

This area is also critical because much of it is vulnerable to flooding from White River. Levees constructed nearly 100 years ago between Dawson Lake and the river at the area's southern extreme may not provide adequate protection from a 100-year flood event. Presently, the Dawson Lake property is zoned for single-family residential use. The significant amount of natural open space and wildlife habitat which remains along the river and within Marrott Park also contribute to this area's unique character.

Recommendations:

a. Re-evaluate the need and feasibility of extending 71st Street across White River. This should be done when the Thoroughfare Plan for the Indianapolis-Marion County metropolitan area is revised.

Marrott Park is now an Indiana Department of Natural Resources State Dedicated Nature Preserve. The Articles of Dedication would not allow the addition of right-of-way that would be likely be required for the extension of 71st Street. A majority of Washington Township Planning Committee members were opposed to the inclusion of the 71st Street extension in the Thoroughfare Plan because of the impact on Marrott Park.

Attendant to a reevaluation of the recommendation to extend 71st Street across White River is the need for an overall analysis of the adequacy of Marion County's roadway network to facilitate travel across White River and other major barriers.

b. Encourage a thorough study by the U.S. Army Corps of Engineers of the condition and reliability of the levee along the west bank of White River. This levee will be expected to protect future residential development from potential flooding. Also, the Federal Emergency Management Act (FEMA) Flood Area Boundary Maps should be revised to reflect as accurately as possible the appropriate flood impacted area(s), given the official flood protection status of the levee as determined by the Corps. Until specific recommendations are made on the basis of technically competent engineering studies, no additional development should be permitted within the floodplain area which would be impacted by a levee failure.

- Prohibit expansion of the non-residential uses which exist in the vicinity of c. 75th Street and Westfield Boulevard. Encourage the ultimate transition of those properties back to residential use. Other than these few commercial establishments, the entire area is residential and park-like in character. Provided that the existing commercial uses can be kept confined to the current land area, and be maintained within structures having residential scale and appearance, they can continue with no anticipated hardship or injury imposed upon neighboring residences. However, this grouping of nonresidential land uses should not be permitted to expand into the residential neighborhood. Also, the permitted uses should be limited to low intensity professional offices. All non-residential uses in this area should be regulated by variances of the Dwelling Districts Zoning Ordinance; ultimately, these sites should be converted back to residential use.
- d. Preserve the proposed Monon Corridor Linear Park in the center of this critical area. The proposed Monon Recreation Corridor will be an important part of Washington Township's park and open space system, and it should be reserved for public use. Specific recommendations about this corridor can be found in the recently adopted Monon Corridor Reuse Plan.

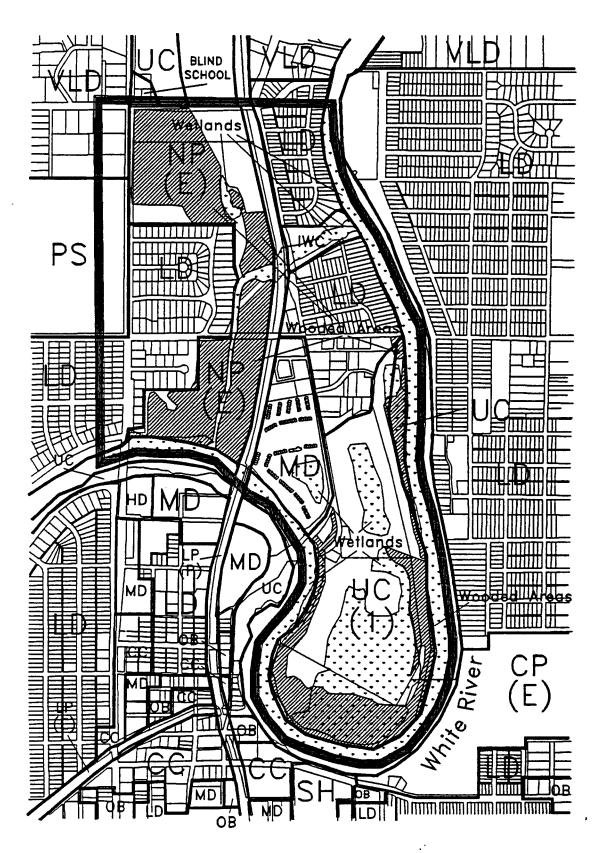
- Soil Limitations The area encompasses three different soil associations: a. Genesee soil predominates in the floodplain area; Fox and Ockley soils account for the remainder. Genesee soil is prone to flooding and it is characterized by wetness. It severely limits the possibilities for shallow excavations, construction of buildings (with or without basements), roadways, and septic systems.
- b. Drainage - significant drainage problems are associated with Genesee soils. the predominant type in this critical area. Where the floodplain (floodway fringe) is located, development must conform to more restrictive standards. No structures whatsoever should be permitted within the floodway. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- Environmental Constraints This critical area includes Marrott Park which c. contains a sizeable nature preserve. The preserve consists of a mature deciduous forest and a low under-brush plain. Williams Creek empties into White River at the southern end of the area; yet, some of the White River flows into Williams Creek within Marrott park via a stream cut-off channel created by floodwaters roughly 30 years ago. Large wetland areas can be found south of the Williams Creek Cut-off, within the oxbow area of the river.

Given the close proximity of Marrott Park, the proposed Monon Recreation Trail, and Broad Ripple Park (immediately south of the area), the Indianapolis Community should strive to preserve as much of the wetlands and woodlands that remain between them to maintain the area's ecological continuity.

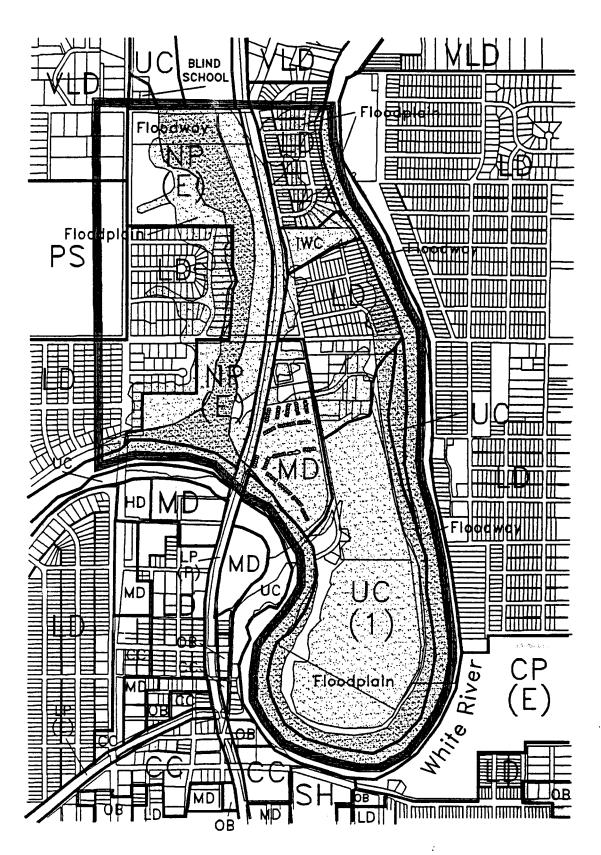
- d. Sanitary Sewers Sanitary sewer service is available in nearly all of that portion of Critical Area 6 which is situated west of Westfield Boulevard. Conversely, most of the area east of Westfield Boulevard within Critical Area 6 is not served by sanitary sewers. A City of Indianapolis sanitary sewer interceptor line runs south and east through the area. Existing development should acquire sewers through the Barrett Law or other procedures. New development should install sanitary sewers to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Water service is currently available in the western portion of Critical Area 6. However, east of the old Monon right-of-way, water service is limited to the area surrounding Westfield Boulevard south of the Williams Creek cut-off. Existing development which is presently served by individual wells should acquire public water service when it becomes available to ensure a water supply free of septic system contamination.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that College Avenue between 96th Street and 71st Street be improved to a four-lane primary arterial roadway. This improvement is the only Thoroughfare Plan priority improvement in Critical Area 6. Westfield Boulevard is recommended for additional right-of-way preservation, but it is not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

While 71st Street is not recommended in the Official Thoroughfare Plan for immediate improvement, it is recommended to be improved eventually to a four-lane primary arterial roadway and to be extended over Williams Creek and White River. To implement this recommendation, an elevated roadway and two four-lane bridges would have to be constructed. To acquire the necessary right-of-way, it is likely that the City would have to forfeit land which was donated as Marrott Park. The Washington Township Planning Committee recommends that the Thoroughfare Plan be amended so that the proposed 71st Street extension through Marrott Park is eliminated (see recommendation a on page 54).

Map 14a - Critical Area 6, Wetland and Woodland Areas



Map 14b - Critical Area 6, Floodway and Floodplain Areas



- Location (see Map 15): The segment of White River from Keystone to Broad Ripple Park, and including the area east of the river to Keystone Avenue. All of the Ravenswood area is included in this Critical Area (approximately 610 acres).
- Land Use Plan Recommendations: Very Low Density Residential (VLD), Low Density Residential (LD), Urban Conservation (UC), Office Buffer (OB), and Commercial Cluster (CC).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Very Low Density Residential - VLD

Low Density Residential - LD

East: Urban Conservation - UC

> Low Density Residential - LD Community Shopping Center - CSC Medium Density Residential - MD

South: Community Park (Existing) - CP(E)

Low Density Residential - LD

West: Low Density Residential - LD

Urban Conservation - UC

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: This area is prone to frequent flooding from White River. At the time of this plan update, the U.S. Army Corps of Engineers is studying potential solutions to the flooding problem. Over 90 percent of the area is located within the floodplain, and many properties fronting the river along the north perimeter of the critical area are within the floodway.

Recommendations:

Encourage the U.S. Army Corps of Engineers to complete its study of a. flooding frequency, magnitude, and duration in this area as it evaluates the feasibility of constructing a flood protection project. The Corps' study should include an evaluation of the area's current land uses and their value. Alternative flood prevention and mitigation strategies should be developed and evaluated on a benefit/cost ratio basis. However, the interests of the area's residents should also be factored into any final decision about which alternative is best and whether to proceed with implementation.

- b. Based on the Army Corps' study, the Federal Emergency Management Act (FEMA) Flood Area Boundary Maps should be revised as necessary to reflect the most current information on flood impacted areas.
- c. No additional development should be permitted within the floodway areas shown on Map 15b. Areas determined to be within the floodway must be clear of obstructions to allow flood waters to be conducted downstream as quickly as possible. The floodway is also designated Urban Conservation (UC) on the Land Use Plan Map. Where the Urban Conservation recommendation is supplemented with an indexed recommendation for residential uses, the intent is to recognize the presence of existing residential structures, not to suggest that any additional development within the floodway would be appropriate.
- d. A neighborhood park should be created immediately south of the White River Yacht Club on roughly two acres of undeveloped property. This area had been part of an area park many years ago, and it continues to offer public access to the river from Ruth Drive. The Township Trustee's office should acquire the property and fund the necessary improvements. Park development should not take place until after a master plan is prepared for the park to establish its best use and to set priorities for programmed improvements.
- e. Improve stormwater drainage efficiency and capacity in the area so that the system can handle present stormwater drainage needs. The Department of Public Works has made significant improvements to the Highland Creek channel and associated culverts, and it should proceed with its current plans to improve the stream flow and drainage characteristics of Bailey Creek, as anticipated in the City's Capital Improvements Program.
- f. Ravenswood is served by a small cluster of businesses around the 7300 block of Ralston Avenue, most of which are appropriately zoned C-3 (Neighborhood Commercial District). The businesses in this area are encouraged to remain at this location because they provide essential services and convenient shopping opportunities to the neighborhood residents. They should continue to be focused primarily on neighborhood commerce, and the building sizes should reflect the more modest scale of operations and be compatible with the surrounding residences. Commercial enterprises intent on attracting business from a greater market area are more appropriately situated along Keystone Avenue and in the Norgate Shopping Center, immediately east of this critical area.

The grid pattern of Ravenswood's streets and the central location of this commercial cluster lead to the recommendation that sidewalks should be installed within the area, along 72nd Street, Ruth Avenue, and Ralston

Avenue. This improvement would facilitate pedestrian traffic between neighboring land uses. In addition, Ralston Avenue should be repaved.

The planning staff contacted the Department of Public Works about the possibility of installing sidewalks in the commercial cluster, and learned that such a project must first be placed into the capital improvements budget. If neighborhood residents and business owners believe their community would benefit from having sidewalks within the commercial cluster, they are encouraged to organize a grass-roots campaign to pursue this goal.

To protect adjacent single-family homes from intrusion of commercial uses, no additional land area should be zoned for commercial use beyond the boundary of the commercial cluster indicated on the land use plan map. Likewise, variances should not be approved for additional commercial uses outside the planned commercial cluster boundaries.

g. In Critical Area 7, enforce drainage standards that will keep new development from adding to the stormwater drainage problems experienced by existing businesses and residents. Site design and drainage engineering plans for the Department of Public Works should accompany any development proposal. Plans must confirm that stormwater drainage will be contained on the site of the new development or be diverted so as not to add to the stormwater drainage burden of the current storm drainage facilities.

- a. Soil Limitations The area is characterized by three different soil associations: the Fox and Ockley soils predominate in the critical area, and the Genesee soil is found in the area of the White River floodway and floodplain. Genesee soil is prone to flooding and it is characterized by wetness. It severely limits the possibilities for shallow excavations, construction of buildings (with or without basements), roadways, and septic systems. Fox and Ockley soils present slight to moderate development limitations.
- b. Drainage Drainage problems in this critical area are predominantly associated with Genesee soils, though Fox and Ockley soils may pose moderate development constraints as well. Development must conform to more restrictive standards where the floodplain, or floodway fringe, is located. No structures whatsoever should be permitted within the floodway. Proposals for new development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City's Drainage and Sediment Control Ordinance.

c. Environmental Constraints - Critical Area 7's most influential environmental feature is White River. However, this area also contains a significant wetland (along Howland Ditch, immediately north and west of the Knights of Columbus facility on 71st Street), and a few wooded areas. The wetland and its adjacent woodland area should be preserved for passive recreation uses.

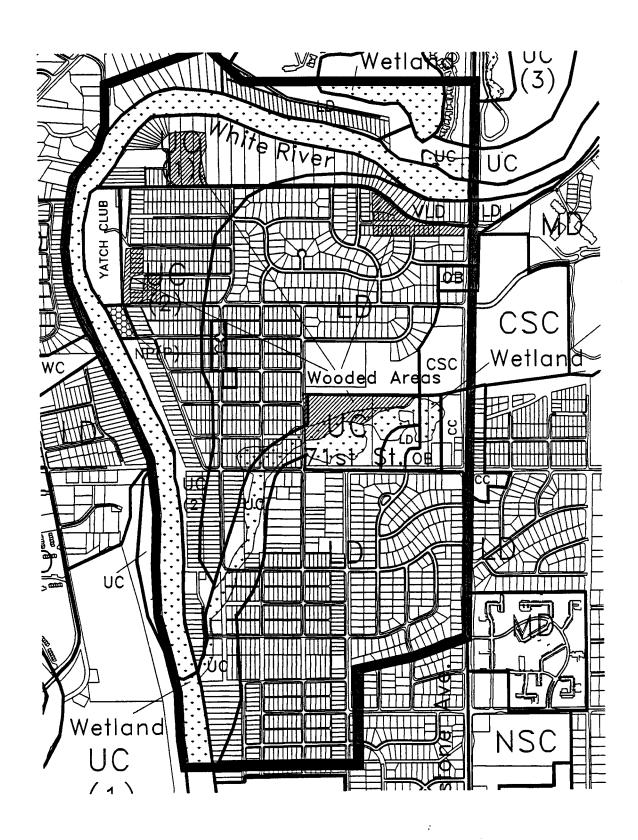
White River represents the area's most important aesthetic amenity, as well as its chief recreational attraction. Boating and fishing are very popular activities along this stretch of the river. Consequently--though not necessarily unique to this critical area--maintenance of high water quality is essential for protecting the public's welfare.

As much as possible, the few remaining tree stands in this area should be preserved in order to provide natural open spaces interspersed throughout the otherwise built-up Ravenswood neighborhood.

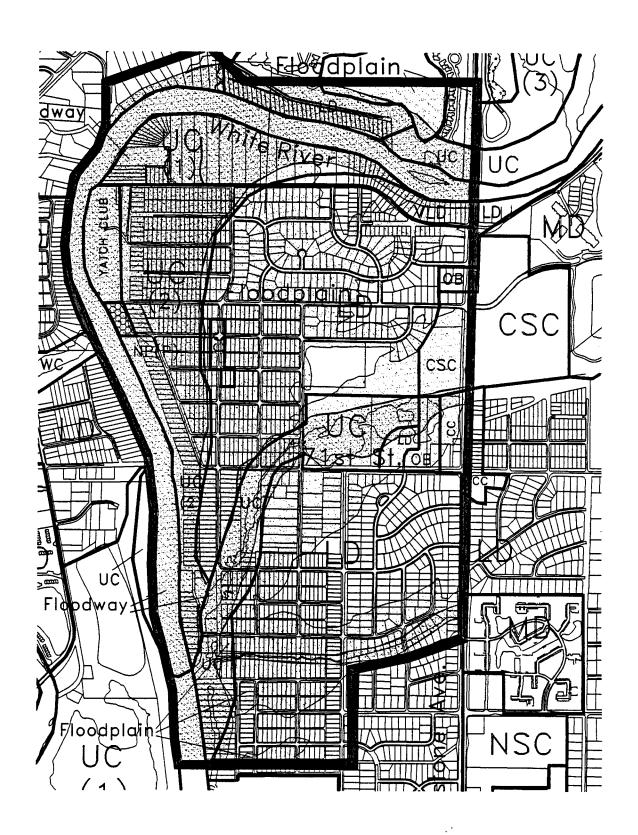
- d. Sanitary Sewers Sanitary sewer service is available in approximately three-quarters of Critical Area 7. Conversely, there exists within this critical area a significantly large section of residentially developed land which does not have access to sanitary sewers. This unserved area is located in the floodway and floodplain of White River. City of Indianapolis sanitary sewer interceptor lines cross through this area. Any proposed new development outside of the floodway should provide sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Water service is available throughout much of Critical Area 7. Larger water lines exist along Evanston Avenue north to 71st Street. North of 71st Street, a large water line exists along Keystone Avenue, with smaller service lines extending westward.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that Keystone Avenue be widened to a six-lane primary arterial roadway from 86th Street to 65th Street. This section of Keystone Avenue is currently under construction. This is the only Thoroughfare Plan priority improvement in Critical Area 7. The Thoroughfare Plan recommends additional right-of-way preservation for 71st Street, but it is not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Maps 15a and 15b, next two pages)

Map 15a - Critical Area 7, Wetland and Woodland Areas



Map 15b - Critical Area 7, Floodway and Floodplain Areas



- Location (see Map 16): The area on both the north and south sides of East 62nd Street, from Chester Avenue to State Road 37 (approximately 245 acres).
- Land Use Plan Recommendations: Very Low Density Residential (VLD). Neighborhood Shopping Center (NSC), Medium Density Residential (MD), Office Buffer (OB), and Junior High School (JH).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Very Low Density Residential - VLD

Low Density Residential - LD Medium Density Residential - MD

East: Very Low Density Residential - VLD

Office Buffer - OB

South: Very Low Density Residential - VLD

West: Very Low Density Residential - VLD

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: This segment of East 62nd Street serves a diverse mix of land uses amidst a largely consistent setting of large lot single-family housing. In addition to the single family homes, the area includes a neighborhood shopping center, a few apartment developments, a Junior High School, child day care businesses, a veterinarian, and office uses. Despite the high intensity and close proximity of commercial, residential, and institutional uses served by this roadway segment and the high traffic volumes that it carries, no sidewalks exist on either side to encourage and accommodate pedestrian travel.

Recommendations:

- Do not allow further expansion of the commercial uses into adjacent a. residential neighborhoods. Any rezonings or variances for commercial use to either the east or west of the current locations should be denied. The boundary lines portrayed on the land use plan map which differentiate between the various land use recommendations should be interpreted as hard and fixed.
- A new sidewalk has been installed recently in front of the Eastwood Junior b. High School. Extension of the sidewalk east and west of the school along the south side of East 62nd Street between Dean Road and State Road 37

- should be a priority to facilitate safe movement of pedestrians, especially children, between neighboring land uses. Although less critical, sidewalks should be also installed along the north side of the street.
- c. Improve the intersection of Allisonville Road and 62nd Street with adequate turn lanes and signalization to facilitate smoother and safer traffic flow. Pedestrian crosswalks and sidewalks should be incorporated into the intersection improvement design.
- d. Limit the nonresidential uses at approximately 4400 East 62nd Street to offices, with appropriately scaled buildings and generous setbacks. Other buffering measures, such as incorporating residential characteristics into the building design and heavy landscaping of transitional yards, are encouraged to minimize the impact on adjoining residential properties.

- a. Soil Limitations Soils in this area include Crosby, Brookston, and Miami. Crosby and Brookston soils are associated with wetness and ponding. These soil types present severe restrictions for building. Miami soils are the only soils in this critical area that present slight restrictions for development. All the rest have unfavorable characteristics for buildings. Any proposed development in Critical Area 8 should take these limitations into account.
- b. Drainage Drainage problems are associated with the Crosby soil type found predominantly in Critical Area 8. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints There are no unique environmental features or constraints in this critical area.
- d. Sanitary Sewers New development should provide sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Water service is available throughout Critical Area 8. Larger lines exist along 62nd Street, Allisonville Road and Dean Road.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that State Road 37 ultimately be widened to six lanes from I-465 to 47th Street. This is the only Thoroughfare Plan priority improvement in

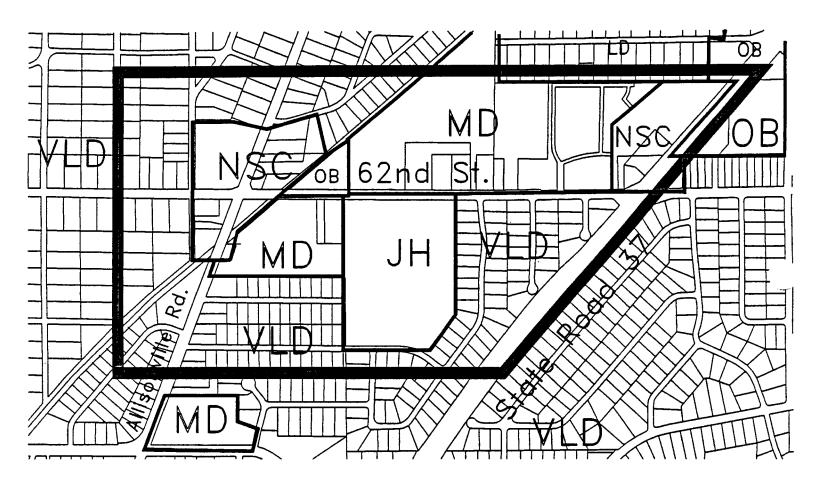
Critical Area 8. Dean Road and 62nd Street are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

The abandoned Norfolk & Southern Railroad traverses this critical area. The railway corridor offers potential for reuse as a commuter mass transit line. It is recommended that this be studied in detail to determine it's viability.

Improved separation of vehicular and pedestrian traffic is needed in this critical area. Sidewalks should be installed along 62nd Street to safely accommodate non-motorized traffic (see recommendation b on page 58).

(See Map 16, next page)

Map 16 - Critical Area 8



- Location (see Map 17): East of Fall Creek Road and west of Emerson Way at 56th Street (approximately 155 acres).
- Land Use Plan Recommendations: Medium Density Residential (MD), Low Density Residential (LD), Very Low Density Residential (VLD), Office Buffer (OB), and Neighborhood Shopping Center (NSC).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Very Low Density Residential - VLD

East: Low Density Residential - LD

Very Low Density Residential - VLD

Urban Conservation - UC

South: Medium Density Residential - MD

Very Low Density Residential - VLD

Office Buffer - OB

Neighborhood Shopping Center - NSC

West: Low Density Residential - LD

Very Low Density Residential - VLD

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: This area contains a neighborhood serving commercial center, including grocery and drug stores. These commercial uses are appropriately concentrated at the intersection of four arterial roadways: Emerson Way, Fall Creek Road, Kessler Boulevard, and East 56th Street. Commercial encroachment into stable residential neighborhoods is a persistent threat to the neighborhoods' continued vitality and integrity.

Recommendations:

a. Limit commercial development at Emerson Way, 56th Street, and Kessler Boulevard to those uses recommended in the plan. These streets form the boundaries of a triangular area which is recommended for commercial use. Retail commercial use is most appropriate for the base of the triangle, while less intense Office Buffer uses are recommended for the part of the triangle near its apex. The Office Buffer uses are needed in this location because residential uses surround it on the west, north, and east.

b. Prohibit commercial uses from expanding into the residential areas to the north and west. West of Emerson Way, particularly along 56th Street, some small scale commercial uses exist. The plan recommends that they continue, but with no further expansion and encroachment into the residential areas to the west and north. Office Buffer uses are recommended at the very edge of the commercial node to minimize negative impacts on adjoining residential properties. Similarly, the office buffer should be the maximum intensity of development at the intersection of Emerson Way and Kessler Boulevard, and it should be limited to the area delineated on the land use plan map. No commercial uses should be permitted along Kessler Boulevard, west of Emerson Way.

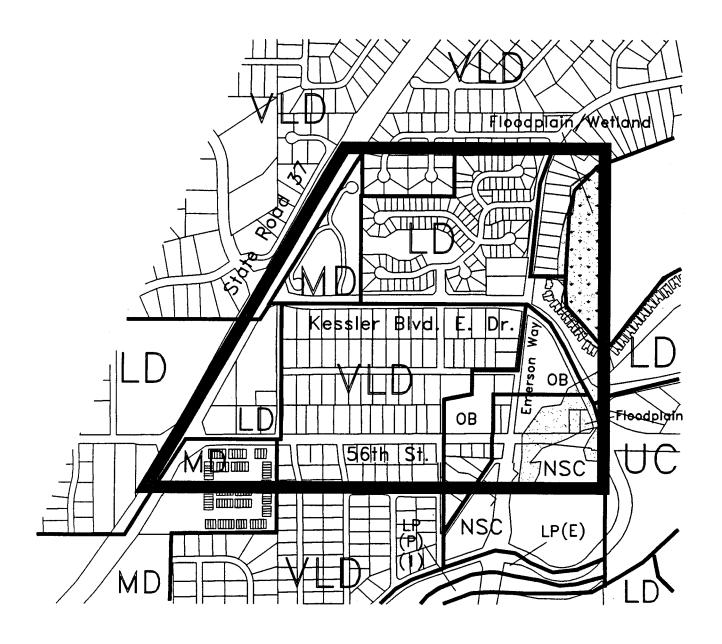
Additional Data:

- a. Soil Limitations Soils in this area include a mixture of Fox, Ockley, and Miami soils. These soil types present slight to moderate restrictions for development.
- b. Drainage Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints There are no unique environmental features or constraints in this critical area.
- d. Sanitary Sewers Sanitary sewer service is available for two-thirds of Critical Area 9. The area bounded by Kesslerview Drive, Fall Creek Parkway, 55th Street and Dahlia Court is unsewered. It would be possible to extend sewer service into the area from an interceptor sewer that follows Fall Creek Parkway. Existing unsewered development should acquire sewer service through the Barrett Law or other procedures. Sanitary sewer extensions into unsewered areas are recommended in order to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Critical Area 9 has water lines along East 56th Street, Fall Creek Parkway and a portion of Kessler Boulevard. It would appear that many homes within Critical Area 9 presently utilize private wells.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that Emerson Way be widened to a four-lane arterial roadway from Fall Creek Parkway North Drive to 56th Street. State Road 37 is

recommended to be a six-lane primary arterial roadway from I-465 to 47th Street. These are the only Thoroughfare Plan priority improvements in Critical Area 9. Emerson Way, Fall Creek North Drive, 56th Street and Kessler Boulevard East are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Map 17, next page)

Map 17 - Critical Area 9



- Location (see Map 18): North of 46th Street on both sides of Millersville Road (approximately 210 acres).
- Land Use Plan Recommendations: Linear Park (Existing) [LP(E)], Neighborhood Park (Proposed) indexed to Very Low Density Residential [NP(P)(1)], Linear Park (Proposed) indexed to Very Low Density Residential [LP(P)(1)], and Very Low Density Residential (VLD).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Medium Density Residential - MD

Very Low Density Residential - VLD Neighborhood Shopping Center - NSC

East: Very Low Density Residential - VLD

Urban Conservation - UC

Linear Park (Proposed), indexed to Very Low Density Residential - LP(P)(1)

South: Very Low Density Residential - VLD

Low Density Residential - LD Linear Park (Existing) - LP(E)

West: Low Density Residential - LD

- Stage of Development: 5 (Established Suburban Area).
- Why Critical: A large undeveloped site at northwest corner of 46th and Millersville Road which includes the Devon Swim Club is recommended for Neighborhood Park use. The site abuts Fall Creek to the west and north, and it includes a significant amount of floodplain area. It also contains a fairly large pond which has been classified as a wetland, and which historically has provided area residents with an opportunity for recreational fishing. Fall Creek Parkway is located on the opposite side of Fall Creek, which further enhances this site's value as a proposed park.

Residential use of the site has been contemplated in the past. Although residential development could fit in with the surrounding area, it would have to be fairly low density. On the other hand, any residential use of the site will also have to be served with sanitary sewers--to offset the cost of installing sewers, a developer will likely have to increase the density. The indexed recommendation of Very Low Density Residential (VLD, 0-2 dwelling units per acre) should still permit residential development of this site, provided the overall gross density does not exceed two units per acre.

Recommendations:

- a. Protect the wetland and floodplain areas from development, and incorporate them into a larger Neighborhood Park on this site. The Department of Parks and Recreation should negotiate for either a purchase or long-term lease of the property. The indexed residential use recommendation applies only to the developable land areas--those not identified as either wetland or floodway.
- b. During park development, contemplate/include means by which the proposed Neighborhood Park and Fall Creek Parkway can be effectively linked. Among the options which should be contemplated are creating a separate pedestrian lane on the north side of the 46th Street Bridge, and constructing and independent pedestrian bridge over Fall Creek in the middle of the community park (at its north end). The latter would afford easy access to the park for nearby multi-family residents.
- c. Continue the proposed community park northward along Millersville Road via a linear park linkage between Millersville Road and Fall Creek to Emerson Way. This would create a complete park setting for both banks of Fall Creek between 46th Street and Emerson Way, and it would allow for the creation of a recreation trail which circumnavigates the two parks.
- d. Improve the linkage between Fall Creek Parkway west of Emerson Way, and Fall Creek Parkway east of Emerson Way by providing better visual identification (signs and crosswalks), and by making specific design improvements to the Emerson Way bridge over Fall Creek. When the bridge structure is either rehabilitated or replaced in the future, a protected pedestrian/bicycle lane should be incorporated into its design. Additionally, if the span allows, pathways should be created which permit pedestrian movement to occur beneath the bridge, thereby providing continuity of the parkway.
- e. Require an appropriate response to the park recommendation in the event of development of the secondary use. If the indexed residential use prevails as the plan is implemented through zoning, then the site development plan should clearly demonstrate responsiveness to the primary recommendation of a Neighborhood Park by including significant open space and recreational facilities with public access.

Additional Data:

a. Soil Limitations - The area encompasses three different soil associations:

Genesee soil predominates in the area and Fox soil accounts for most of the remainder. Genesee soil is prone to flooding and it is characterized by

wetness. It severely limits the possibilities for shallow excavations, construction of buildings (with or without basements), roadways, and septic systems.

- b. Drainage Drainage problems are associated principally with the Genesee soil, which is the predominant type in this critical area. Development must conform to more restrictive standards where the floodplain, or floodway fringe, is located. No structures whatsoever should be permitted within the floodway. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints A large wetland (most of which is a lake) is situated at the center of this critical area. The entire wetland is located within the hundred-year flood boundary. Additionally, a wide ribbon of woodlands stretches from the northeast part of this area to the southwest corner, paralleling Fall Creek's left bank.

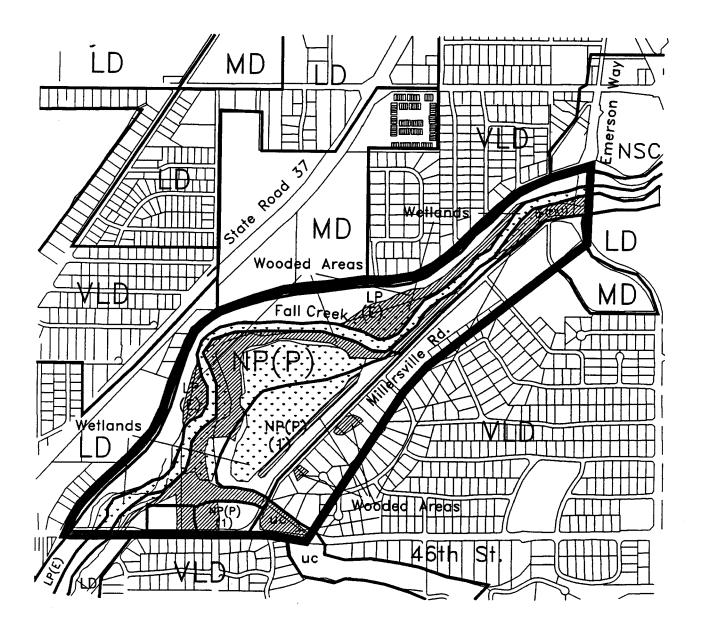
The Comprehensive Plan recommends that all of the area containing these natural features be converted into a Community Park. Private development of a very large portion of the area would be practically impossible because it is classified as either Floodway or wetland. The plan recognizes private development potential for the balance of the site (the eastern fringe) by indexing to a secondary land use recommendation of Very Low Density Residential (VLD). Should residential development be contemplated for the eastern portion of this area, care should be taken to soften the visual impact it may have on the lake and surrounding natural areas. Clustering of the units, application of varied setbacks, use of low building profiles, and sympathetic landscape treatments will diminish any perceived incongruity.

- d. Sanitary Sewers Critical Area 10 is currently unsewered, with the exception of the north-east tip of the area. An interceptor sewer runs parallel to Fall Creek Parkway on the north-east parameter, making it possible to extend the sewers into the area. New development should provide sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Within Critical Area 10, which is predominantly undeveloped, water lines are found along East 46th Street and along a portion Fall Creek Parkway North Drive.
- f. Transportation The Official Thoroughfare Plan for Marion County does not recommend any priority improvements in Critical Area 10. Fall Creek

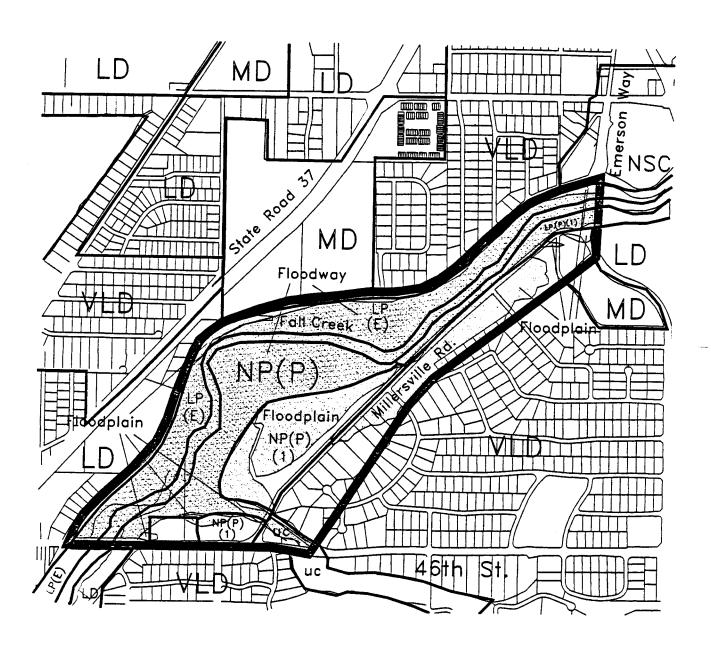
Parkway North Drive and 46th Street are recommended for additional rightof-way preservation, but they are not recommended for specific roadway improvements.

(See Maps 18a and 18b, next two pages)

Map 18a - Critical Area 10, Wetland and Woodland Areas



Map 18b - Critical Area 10, Floodway and Floodplain Areas



- Location (see Map 22): South of 52nd Street between Carrollton Avenue and Keystone, and south of 46th Street between Keystone Avenue and Millersville Road, extending southward to 38th Street (approximately 340 acres).
- Land Use Plan Recommendations: Linear Park (Existing) [LP(E)], Low Density Residential (LD), Medium Density Residential (MD), Neighborhood Park (Existing) [NP(E)], Commercial Cluster (CC), Office Center (OC), Office Buffer (OB), Neighborhood Shopping Center (NSC), Light Industry (LI), Urban Conservation (UC), Linear Park (Proposed) [LP(P)], and the following special uses: Indianapolis Water Company Treatment Plant, Indiana State Fairgrounds, and The Indiana Deaf School.
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Low Density Residential - LD

Medium Density Residential - MD

Light Industry - LI

Linear Park (Proposed) - LP(P)

Neighborhood Shopping Center - NSC Very Low Density Residential - VLD

East: Low Density Residential - LD

Very Low Density Residential - VLD

South: Commercial Cluster - CC

Light Industry - LI

Urban Conservation - UC Low Density Residential - LD

Special Use (IUPUI)

West: Low Density Residential - LD

- Stages of Development: 2 (Center City Revitalization Area), 4 (Suburban Revitalization Area), and 5 (Established Suburban Area).
- Why Critical: This area includes Fall Creek and an associated geologic depression which contain water-bearing alluvial sand and gravel deposits. This aquifer has been tapped by the Indianapolis Water Company to provide drinking water to the citizens of Indianapolis. The Water Company currently operates seven wells within this area, plans to utilize two more in the near future, and will develop additional wells as water needs occur. Preserving this area's ability to serve as a ground water resource is critical, and the most basic and effective strategy for protecting ground water is restricting the types of land uses which locate near it.

Recommendations:

- a. Protect the aquifer, which is a significant source of ground water in this portion of Marion County (refer also to recommendations b through l, below).
- b. Keep development densities near their current levels, preserving as much of the remaining open space as possible. Minimize the amount of impervious surface area to reduce the frequency of flooding and to allow more rainwater to reach the aquifer. Adherence to transitional yard and building setback requirements will help prevent over-intensification of the area's land uses, and will allow for the return of more rainwater to the soil.
- Restrict uses to only those which pose no threat of contamination to the C. aquifer. Prohibit the placement of threatening land uses. For example, dry cleaning establishments, car washes, chemical storage, and gasoline service stations are not acceptable uses in this critical area. The permanent storage and regular use of chemicals on site make such businesses potentially harmful to the drinking water supply. All development petitions must be evaluated carefully by staff regarding the use or storage of petroleum products, detergents and other commercial cleaning agents, salts, solvents, and other chemicals. Development petitions must include appropriate commitments or conditions that prohibit unacceptable uses. The Indianapolis Water Company must also be consulted during the development review process. A number of "unacceptable uses" are already located within this area. Once an aquifer protection plan is in place for this area (see recommendation d below), these pre-existing uses should be reevaluated regarding their appropriateness within the aquifer protection area.
- d. Develop an "Aquifer and Well Field Protection Plan" that will summarize existing protection programs, map primary and secondary well field protection areas, and recommend detailed land use and development policies. Such a plan should include an inventory of past, present, and potential sources of groundwater contamination and a contamination contingency plan. The Marion County Health Department is an appropriate agency to undertake the plan.
- e. Prohibit dry wells in this critical area. Most natural drainage systems allow storm water to slowly percolate through the soil layers where it can be filtered and cleansed of some contaminants before eventually reaching the aquifer. Dry wells, on the other hand, accelerate site drainage by bypassing layers of soil; consequently, they more directly expose the aquifer to contaminants.

- f. Educate property owners and lease holders to prevent groundwater contamination through proper management of the application of chemicals on landscaped yards, park land, and other open areas. The Indianapolis Water Company, Marion County Health and Hospital Corporation, and the Department of Metropolitan Development can conduct public education seminars, advertising campaigns, or neighborhood meetings to encourage conservation and protection of this aquifer and others in Marion County. Such conservation methods may include organic or other non-chemical means of controlling insects and "Tox-Away" programs for safe disposal of toxic household wastes.
- Post signs along 38th Street, Keystone Avenue, 46th Street, 42nd Street, g. Millersville Road and State Road 37 which display emergency phone numbers to facilitate immediate notification of fire departments and other emergency personnel about potential groundwater contamination.
- h. Study the possibility of introducing an "Aquifer Overlay Zoning District" which could specify appropriate land uses, list prohibited chemicals, and provide other viable regulatory measures. Such a zoning district could be appropriate because of the importance of maintaining a safe water supply. Zoning district regulations may include but are not limited to the following:
 - prohibition of land uses potentially threatening to groundwater;
 - transfer of development rights from this zoning district to an area outside of the aquifer area:
 - performance standards that set forth special requirements for potential developers in this area;
 - more stringent site plan review:
 - more stringent drainage standards to protect groundwater from contaminated storm water:
 - encouragement of cluster subdivisions;
 - impervious coverage standards to limit the area of streets and other impervious surfaces that prevent water from entering the ground;
 - chemical and fuel storage restrictions:
 - stringent sewage discharge permits;
 - regulation of septic system cleaners;
 - conversion of septic systems to sewer systems; and
 - nitrogen loading standards to control the amount of nitrogen that is added to the soil via fertilizers.
- i. Require potential developers to prepare and implement plans of operation which recognize and protect the aquifer. Include in the plans of operation guidelines for the prevention and abatement of groundwater contamination.

- j. In areas with recommendations for residential development, implement cluster development to help preserve environmentally sensitive areas. Clustering reduces the area of impervious street surface, allowing more storm water to be absorbed by the soil and ultimately return to the aquifer. In order to preserve wooded areas in cluster developments, require tree inventories and preservation plans.
- k. To preserve subsurface water quality, require all development to be served by sanitary sewers and city water. For new residential developments, the development cost can be reduced through clustering (see recommendation j, above).
- 1. Closely monitor area development and its effect on groundwater quality. This should be done by the Indianapolis Water Company.
- m. Revise the Keystone Avenue Corridor Plan to reflect the aquifer protection needs of the area, and to better address vacant and deteriorating commercial properties along Keystone Avenue. The plan should focus on how to best promote and encourage reuse of vacant and underused commercial buildings and parking areas.
- n. Fully implement the recommendations contained in the 38th Street Corridor Plan. This detailed plan was adopted in 1985, and was focused toward encouraging reinvestment into existing commercial and residential properties along 38th Street.

Additional Data:

- a. Soil Limitations Critical Area 11 is made up of Urban land-Fox, Urban land-Genesee, Urban land-Miami, and Ockley soils. Urban land soils are difficult to characterize, but Genesee soils severely limit development because of wetness and flooding. The Miami soil may severely limit commercial development and moderately limit residential development because of shrink-swell characteristics. In this critical area, sanitary sewers and appropriate site preparation and construction measures should be used to offset or mitigate the soil limitations and help ensure the long-term viability of development in the area.
- b. Drainage Drainage problems are associated with the Genesee soils present in this critical area. Future development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.

c. Environmental Constraints - Two environmental constraints predominate in Critical Area 11: the presence of an underground water reservoir (or aquifer), and the Fall Creek corridor. Unlike other large aquifers in Marion County, the aquifer underlying the land uses in Critical Area 11 is a static pool of water rather that an underground river. However, like all aquifers, it is an abundant supply of relatively clean water that is recharged by rainfall percolating through the soil and seepage from nearby surface water bodies (such as Fall Creek). Therefore, it is important to make sure that dangerous chemicals not be stored in this area (refer to recommendations a through 1 on pages 80-82).

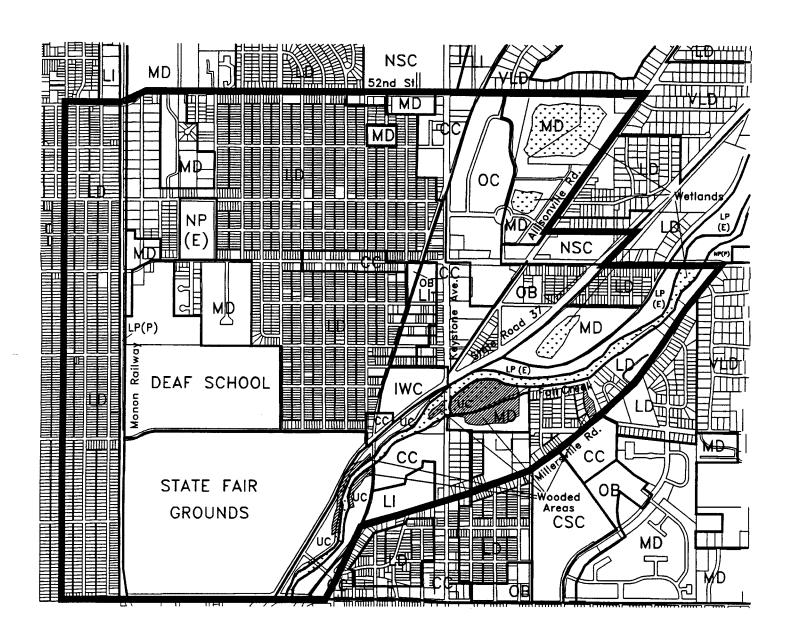
The portion of the Fall Creek corridor which runs through this area has somewhat contrasting characteristics. The eastern section (east of State Road 37) is fairly broad and it includes a public parkway. The western portion of the corridor is more narrow with industry adjoining to the south and a sixlane arterial roadway marking the northern edge. Yet, immediately west of the narrow section is broad section containing another segment of Fall Creek Parkway. The section of Fall Creek located between 38th Street and the point where Fall Creek Parkway intersects with State Road 37 represents a significant challenge to the community and to the City's Parks Department. It is a "missing link" which, if it were to be improved as a parkway or recreation corridor, would complete a public open space project that was first envisioned more than 60 years ago. However, until the City can move forward with such an effort, the corridor must be protected from insensitive encroachment by adjacent developments, and it needs to be kept free of garbage and debris that come from repeated instances of illegal dumping. Strict enforcement of existing regulations is warranted. Meanwhile, the Department of Parks and recreation should explore possible funding mechanisms for developing a parkway along this portion of Fall Creek.

- d. Sanitary Sewers Sanitary service is available throughout Critical Area 11. Four north-south interceptor sewers run through the area. Existing unsewered developments should acquire sewer service through the Barrett Law or other procedures, and new development should provide sewer service in order to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- e. Water Facilities Critical Area 11 has water service throughout the entire area. The Indianapolis Water Company maintains a pumping facility at the intersection of Keystone Avenue and Fall Creek Parkway.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that State Road 37 be improved to a six-lane primary arterial roadway from I-465 to 47th Street and that Keystone Avenue be improved to

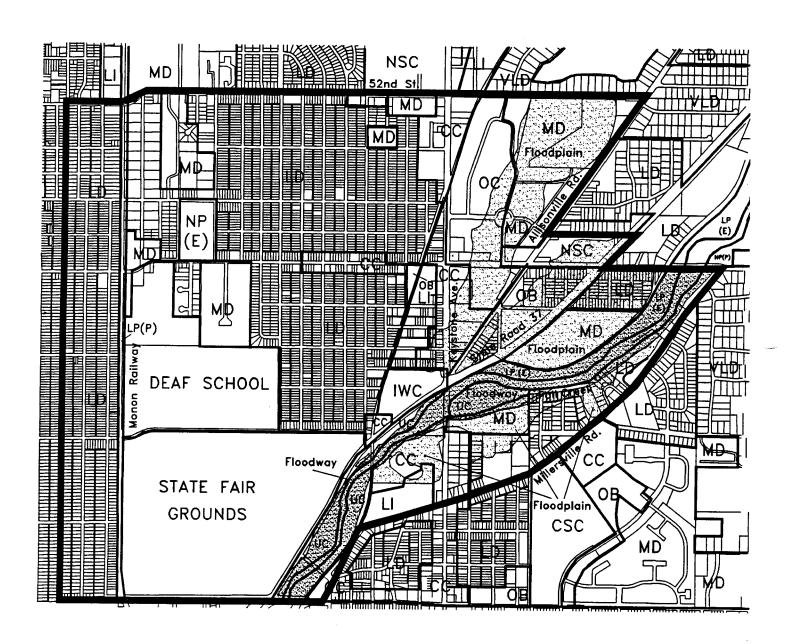
a four-lane primary arterial roadway from Fall Creek Parkway to 25th Street. In addition it also recommends that 38th Street be a six-lane primary arterial roadway from Sherman Drive to Fall Creek Parkway. These are the only Thoroughfare Plan priority improvement recommendations in Critical Area 11. Allisonville Road, 46th Street, 52nd Street, and Fall Creek Parkway North Drive are recommended for additional right-of-way preservation, but they are not recommended for specific right-of-way preservation. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of existing Thoroughfare Plan.

(See Maps 19a and 19b, next two pages)

Map 19a - Critical Area 11, Wetland and Woodland Areas



Map 19b - Critical Area 11, Floodway and Floodplain Areas



- Location (see Map 20): The White River corridor, including the St. Maur Theological Center area and both sides of Michigan Road (approximately 380 acres).
- Land Use Plan Recommendations: Very Low Density Residential (VLD), Low Density Residential (LD), St. Maur Theological Center (St. Maur), Community Park (Proposed) in part indexed to Very Low Density Residential [CP(P) and CP(P)(1)], Urban Conservation in part indexed to Very Low Density Residential [UC and UC(1)].
- Surrounding Land Uses Recommended in the Comprehensive Plan:

North: Very Low Density Residential - VLD

East: Urban Conservation - UC

Linear Park (Existing) - LP(P)

South: Regional Park (Existing) - RP(E)

West: Medium Density Residential - MD

Very Low Density Residential - VLD

Urban Conservation indexed to Very Low Density Residential - UC(1)

Low Density Residential - LD

- Stages of Development: 3 (Established Center City Area) and 5 (Established Suburban Area).
- Why Critical: This area is critical because it represents one of the few remaining opportunities to establish a public park in Washington Township. Also, it is an environmentally sensitive area, with a significant amount of floodplain and wetland areas. This area has been bypassed by development largely due to its susceptibility to flooding. The Saint Maur Theological Seminary occupies the eastern portion of this critical area. It currently provides for a variety of recreational uses, with public access permitted at a reasonable cost.

Recommendations:

a. Acquire the low-land portion of the Saint Maur site for a Community Park. This area is already serving this function to some degree, with Saint Maur playing the role of land steward and activity programmer. Should the parent monastery decide to liquidate any part of its landholdings here, the Department of Parks and Recreation should acquire it and keep this community asset in the public domain.

- b. Protect the White River floodway. Prohibit the construction of any buildings within it.
- c. Protect the wetlands in this critical area. Use of the lake on Saint Maur's property should be limited to swimming and more passive recreation activities such as fishing. The lake situated west of the Indianapolis Museum of Art should remain in a natural state. It and the surrounding woodlands provide a tranquil backdrop for events and exhibits utilizing the museum's outdoor facilities.
- d. Preserve this segment of White River and its associated wetland and floodplain areas as open space. This open space area should remain linked with those to both the north and south as a continuous greenway through Washington Township and the balance of Marion County.

Additional Data:

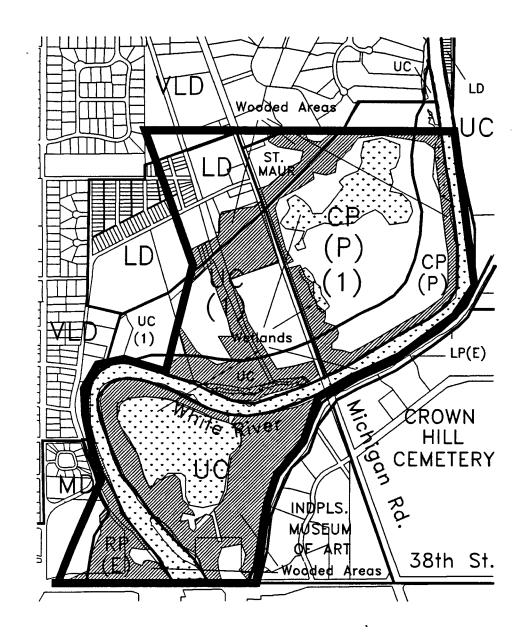
- a. Soil Limitations Soils in this area include Crosby, Brookston, and Genesee. Crosby and Brookston soils are associated with wetness and ponding, and Genesee soil is associated with ponding. All of these soils types present severe restrictions for building and any proposed development in Critical Area 12 should take these limitations into account.
- b. Drainage Drainage problems are associated with the area's soils. In addition, a large portion of the critical area is in the White River floodplain. Potential development must be accompanied by a thorough analysis of on-and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints The St. Maur property which is located east of Michigan Road is characterized by low wetland and floodplain areas, and it contains a small lake. The seminary operates a recreation facility at the site, offering fishing, swimming, picnicking, softball, and other outdoor activities. Another lake in this critical area (one located just north of 38th Street and west of the Indianapolis Museum of Art) is not open to the public for active recreation. It attracts local fishermen however. Another major water body, White River, forms the critical area's southeastern boundary. Overall, the area contains a significant amount of surface water features (wetlands, lakes, and streams), and a wide floodplain. Bypassed by urban development, this area provides natural habitat for a variety of wildlife.
- d. Sanitary Sewers Critical Area 12 is generally unsewered. The exceptions are Holcomb Estates Condominiums, the Saint Maur Theological Center and

the Indianapolis Museum of Art. Extension of sanitary sewers into the unserved potions of the area are feasible since there is an interceptor sewer on the eastern parameter. New development should provide sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.

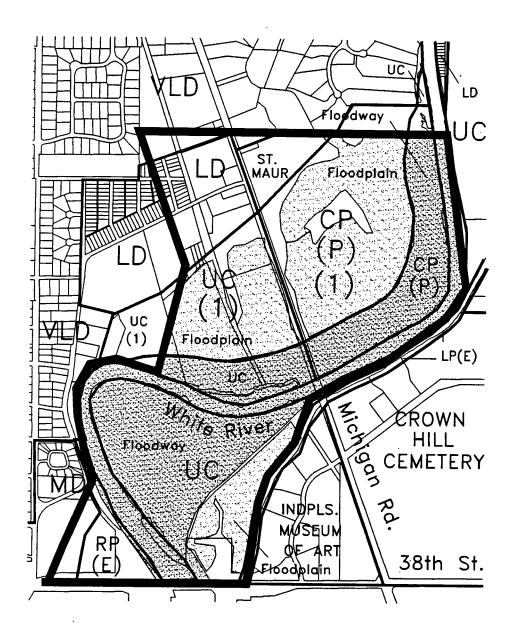
- e. Water Facilities Service areas of the Indianapolis Water Company can be found in all directions from Critical Area 12, though none appears to be located within its boundaries. Larger water lines are found on the south side along West 38th Street, on the west along Knollton Road, and on the north along Michigan Road.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that 38th Street be widened to six lanes from Michigan Road to Lafayette Road, and that Michigan Road be a four-lane primary arterial from 86th Street to 38th Street. These improvement recommendations are the only Thoroughfare Plan priority improvements in Critical Area 12. Grandview Drive is recommended for additional right-of-way preservation, but is not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Maps 20a and 20b, next two pages)

Map 20a - Critical Area 12, Wetland and Woodland Areas



Map 20b - Critical Area 12, Floodway and Floodplain Areas



- Location (see Map 21): The Indianapolis Wat Company Canal from its beginning in Broad Ripple, to the point where it exits Washington Township at 38th Street (approximately 100 acres).
- Land Use Plan Recommendations: Linear Park (Existing) [LP(E) and Urban Conservation (UC).
- Surrounding Land Uses Recommended in the Comprehensive Plan:

Northwest: Urban Conservation - UC

Community Park (Proposed) - CP(P)

Butler University

Low Density Residential - LD

Riviera Club

Commercial Cluster - CC

Medium Density Residential - MD

Office Buffer - OB

Linear Park - LP (Proposed) - LP(P)

Southeast:

Indianapolis Museum of Art

Crown Hill Cemetery Butler University

Low Density Residential - LD

Neighborhood Shopping Center - NSC Very Low Density Residential - VLD

Commercial Cluster - CC

Office Buffer - OB

Linear Park (Proposed) - LP(P)

- Stage of Development: 3 (Established Center City Area).
- Why Critical: The Indianapolis Water Company (IWC) Canal serves two primary functions, and a third, less obvious function. The canal is (1) a significant water supply for Indianapolis, (2) a unique and popular recreational facility, and (3) a historical landmark. Land use recommendations for adjoining properties are critical to the continued success of the canal with respect to its three functions. Also, future use and treatment of the canal by the City will have a lasting impact on the adjoining neighborhoods.
- Recommendations:

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a. Maintain the canal's viability as an aqueduct for the transmission of surface water to IWC treatment facilities. The canal should be kept free of debris,

and it should be kept clean to prevent unnecessary overburden of treatment facilities down stream.

b. Permit only non-threatening and non-toxic land uses to locate on sites adjacent to the canal. Gasoline service stations and dry cleaning establishments should only be located near the canal if surface drainage is directed away from the canal and into the storm sewers.

The parking deck east of College Avenue is structurally unsafe and should either be removed or replaced. If it is replaced, the parking deck should be engineered to channel water runoff away from the canal. This would also channel away leaking engine oil and other fluids and minimize the risk of drinking water contamination.

- c. Continue to use the canal banks for recreation. The old tow path on the north bank should continue to be improved and maintained for more active forms of corridor recreation such as walking, running, and bicycling. As part of this effort, the Indianapolis Water Company should continue with plans to place mile markers along the canal. The south bank should continue to be maintained for more passive uses such as picnicking and fishing. Recreational uses should not be detrimental to the integrity of the canal. The canal should be used in accordance with the recommendations of the Indianapolis Metropolitan Greenways Plan, which should be completed in the fall of 1993. The Indianapolis Water Company is currently participating in this planning process.
- d. Facilitate safe crossing of the waterway by pedestrians and bicyclists. This should be accomplished with wide sidewalks constructed when roadway bridges are reconstructed and/or with pedestrian bridges. New sidewalks for roadway bridges should be wider than current sidewalks, as exemplified by the new Kessler Boulevard bridge. In addition, the sidewalks on the Illinois Street, Meridian Street, College Avenue, and Central Avenue bridges should be separated from the traffic lanes with raised curbing. The Illinois Street bridge is insufficient and should be repaired or replaced in the future. Renovation offers an excellent opportunity improving the bridge's sidewalks.

Although the Indianapolis Water Company does not look favorably on any new pedestrian bridges across the canal, such a bridge would offer movement from one side of the canal to the other without the danger of automobile traffic. The need for a pedestrian bridge is most apparent immediately west of College Avenue. At this five-way intersection, guardrails limit pedestrian access to the sidewalk that crosses the canal west of College Avenue and cars endanger pedestrians. A pedestrian bridge aligned with Broadway Avenue would be appropriate. The Indianapolis Water Company, the sole owner of

the canal right-of-way, will review and approve any plans for new bridge structures or rehabilitation of existing bridge structures across the canal prior to construction.

- e. Improve all crosswalks with reflective tape and signage to alert motorists of the likelihood of pedestrians.
- f. Preserve "Alice Carter Place" at Meridian Street and Westfield Boulevard as an urban green space.
- g. Erect signs to inform canal "parkway" users of its historical significance.

 Whenever bridges over the canal are either rehabilitated or replaced, plaques should be incorporated in their design which summarize the canal's history.

Additional Data:

- a. Soil Limitations The area encompasses four different soil associations:

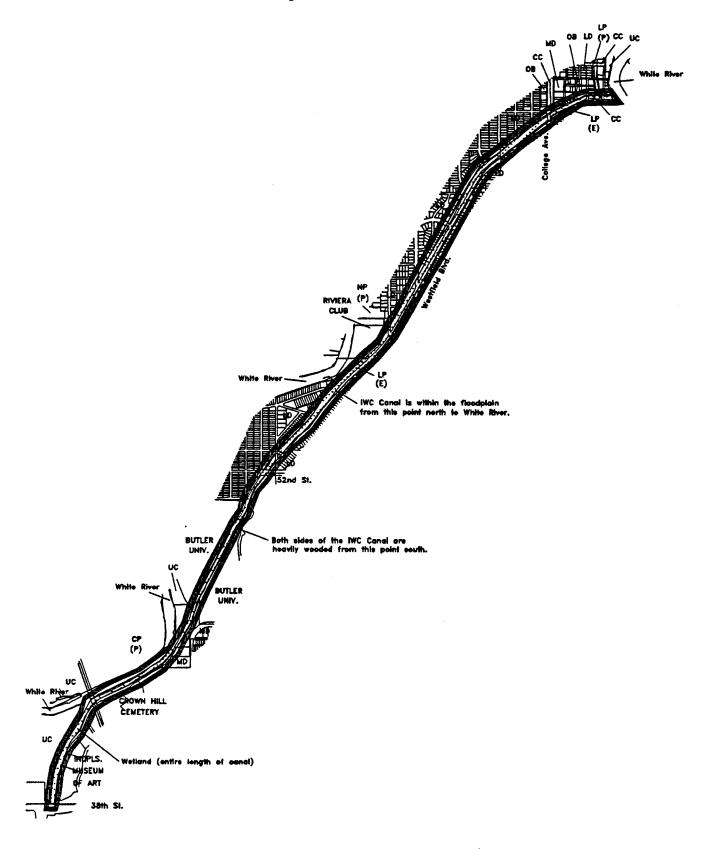
 Genesee and Sloan soils predominate adjacent to the canal; Urban landGenesee and Hennepin soils account for the remainder. Genesee soil is prone
 to flooding and it is characterized by wetness. It severely limits the
 possibilities for shallow excavations, construction of buildings (with or
 without basements), roadways, and septic systems.
- b. Drainage Drainage problems are associated with the Genesee and Sloan soils found in this critical area. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that follow the requirements contained in the City Drainage and Sediment Control Ordinance.
- c. Environmental Constraints The Indianapolis Water Company Canal is viewed by most residents of Washington Township as a significant natural open space and recreation amenity for the central portion of the township. This is somewhat ironic considering that the canal was originally built for the purpose of transporting raw materials and finished goods across the State of Indiana. Now the canal serves primarily as a kind of aqueduct by transporting water from White River to the IWC treatment plant. Despite its man-made beginning and its utilitarian function, the IWC Canal provides all the necessary ingredients to attract fish, ducks, geese, frogs, and other wildlife. It is not surprising then to find it depicted on the National Wetland Inventory Maps as being a wetland.
- d. Sanitary Sewers An interceptor sewer follows Westfield Boulevard from 60th Street to 52nd Street, running parallel to the canal. Infill development should provide sewer services to prevent health hazards associated with soils'

inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.

- e. Water Facilities Water service is available along almost all of the south and east side of Critical Area 13, as well as much of the developed portion of the west and north side--with the exception of the Rocky Ripple area.
- f. Transportation The Official Thoroughfare Plan for Marion County recommends that Michigan Road be a four-lane primary arterial, and that 38th Street be widened to a six-lane primary arterial. These are the only priority improvement recommendations in Critical Area 13. Westfield Boulevard, Capitol Avenue, Central Avenue, Illinois Avenue, College Avenue, and Meridian Street are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements. Right-of-way should be preserved along these roadways as it becomes available or as development occurs along them to accommodate future intersection improvements and roadway widenings, including those beyond the scope of the existing Thoroughfare Plan.

(See Map 21, next page)

Map 21 - Critical Area 13



- Location (see Map 22): White River and its left (east) bank, from the Monon Rail corridor southwest to the Butler University athletic fields (approximately 230 acres).
- Land Use Plan Recommendations: Community Park (Proposed) [CP(P)], Urban Conservation (UC), Very Low Density Residential (VLD), Low Density Residential (LD), Neighborhood Park (Proposed) [NP(P)], Neighborhood Park (Existing) [NP(E)].

Surrounding Land Uses Recommended in the Comprehensive Plan:

Northwest: Community Park (Proposed) - CP(P)

Very Low Density Residential - VLD

Urban Conservation - UC

Neighborhood Park (Existing) - NP(E)

Low Density Residential - LD

Southeast: **Butler University**

Low Density Residential - LD

Riviera Club

Neighborhood Park (Proposed) - NP(P) Very Low Density Residential - VLD

High Density Residential - HD Medium Density Residential - MD

- Stage of Development: 3 (Established Center City Area).
- Why Critical: Frequent flooding of the White River and the potential for levee breakage make this a critical area. The U.S. Army Corps of Engineers is currently studying the problem. Two well established neighborhoods are affected: Warfleigh and Rocky Ripple. (Upstream, the Ravenswood neighborhood is similarly affected by White River flooding problems, but it has been identified as Critical Area 6 to address some other issues too). Residential uses are well established in both neighborhoods, although Rocky Ripple contains a significant number of undeveloped lots. The levees protecting these neighborhoods are old and inadequately designed for withstanding a 100-year flood event.

This stretch of White River is susceptible to periodic flooding, especially along its left (or east) bank where the majority of the river's floodplain is located. Levees have been in place for many years along the left bank to protect residential neighborhoods developed in the floodplain; however, their condition and reliability for containing larger floods has recently been questioned. The U.S. Army Corps of Engineers is currently studying the potential for strengthening the levees, together with a similar analysis of the Ravenswood Area (see Critical Area 7).

Recommendations:

- a. Encourage the U.S. Army Corps of Engineers to complete its study of flooding frequency, magnitude, and duration for this portion of the White River floodplain. The Corps' study should include an evaluation of the area's current land uses and the property values. Alternative flood prevention and mitigation strategies should be developed and evaluated on a benefit/cost ratio basis. However, the interests of the neighborhoods' residents should also be factored into any final decision about which alternative is best and whether to implement it.
- b. Grant the residents of both Warfleigh and Rocky Ripple sufficient opportunities to express their views and concerns, and to ask questions throughout the study period. The Indianapolis Department of Public Works should monitor closely and report periodically on the Corps' progress.
- c. Ultimately, strengthen the existing levees in some manner to ensure the safety of current residents and future generations. Arguments against making such improvements which focus on the lack of catastrophic flooding over recent time periods are irrelevant due to the need to protect these communities from the flood volume generated by the infrequent (and unpredictable) 100-year rainfall event.
- d. Provide for a potential recreational linkage of this stretch of White River with the upstream and downstream portions of it through the selected levee strengthening alternative(s). This should facilitate usage of the White River corridor as a community greenway. The White River Greenway Development Board should monitor the Corps' progress and assist with the identification and development of acceptable alternatives. In addition, the Development Board should enlist the public in formulating its greenways plan. The Development Board should specifically seek the input of Warfleigh and Rocky Ripple residents.

Additional Data:

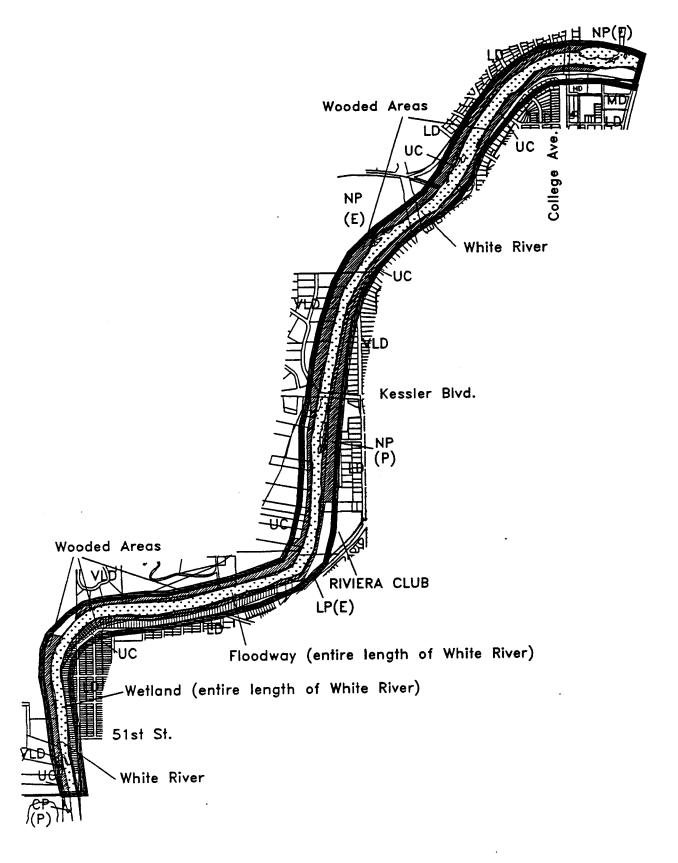
- a. Soil Limitations Genesee soil is found predominantly in Critical Area 14, with Hennepin soil also present. Genesee soil is prone to flooding and it is characterized by wetness. It severely limits the possibilities for shallow excavations, construction of buildings (with or without basements), roadways, and septic systems.
- b. Drainage Drainage problems are associated with the Genesee soils found in this critical area. Potential development must be accompanied by a thorough analysis of on- and off-site drainage impacts, as well as drainage plans that

follow the requirements contained in the City Drainage and Sediment Control Ordinance.

- c. Environmental Constraints - White River, with its adjoining wetland areas and floodplains, is a significant green-space cutting across the middle of one of Marion County's most developed townships. Along this particular stretch of the river lie three existing park areas, and a fourth is proposed at its southern end at St. Maur. Maintaining the natural setting, the woodlands, the cleanliness of the stream and area soils will be essential to the preservation of wildlife species inhabiting the parks and other nearby open spaces. The river is prone to flooding along this stretch, as its floodway and floodplain areas broaden.
- d. Sanitary Sewers - White River is a natural waterbody and it is unserved by sanitary sewers. Any new infill development proposed in its vicinity should provide sewer services to prevent health hazards associated with soils' inability to accommodate septic systems. Potential developers should contact the Department of Public Works' sewer permitting division regarding sewer service needs.
- Water Facilities Critical Area 14 has water service available along much of e. its length, especially in the residentially developed areas. The Rocky Ripple Community is an exception to this generalization.
- f. Transportation - The Official Thoroughfare Plan for Marion County does not recommend any priority improvements for Critical Area 14. College Avenue, Meridian Street, and Kessler Boulevard are recommended for additional right-of-way preservation, but they are not recommended for specific roadway improvements.

(See Map 22, next page)

Map 22 - Critical Area 14



Conclusion

The Washington Township Comprehensive Land Use Plan was developed over a period of approximately one year through a systematic and highly participatory process. During this time, Division of Planning staff initiated the planning process, gathered and analyzed township data, and led planning meetings. The township planning committee worked with Division of Planning staff for six months to develop the final plan. The plan's recommendations reflect thorough examination of township population and land use characteristics as well as open discussion of planning and development goals. The recommendations of the plan map and plan narrative will help guide the future development of Washington Township. This plan should help Washington Township develop and maintain land use patterns that provide for livability and environmental quality throughout the community.

The plan will be evaluated in the future to determine when there is a need for revision. Some of the factors that may indicate the need for a revision include fundamental changes in land use or population, rapid development of all or part of the township, and extension of major sewer or water lines. Periodic revisions can be made via the adoption of new critical areas or subarea plans, thereby keeping the Washington Township Plan current without development of an entirely new township plan. When the time comes to revise the township plan as a whole, the process will again be thorough, highly participatory, and reflective of the community's planning and development goals.

Appendix A

Washington Township Planning Committee

The Planning Committee was an open membership committee. The Planning Division initiated formation of the Planning Committee by inviting neighborhood organization presidents, school board members, City-County Council members, Metropolitan Development Commission members, and other community leaders. The Division advertised the planning process and meetings in local media. It also relied on committee members to communicate with other township residents.

Eight meetings were held for the formation of this Washington Township Comprehensive Plan. Members of the Planning Committee participated actively throughout the planning process. Thus, plan recommendations reflect extensive committee discussion and analysis. The Planning Division staff thanks the Washington Township Planning Committee members for their invaluable participation and patience throughout the months of review and revision that resulted in the Washington Township Comprehensive Land Use Plan. The following is a list of Washington Township Planning Committee members who attended committee meetings.

Harold Anderson John Atkinson

James D. Bartlett, Sr. Matthew C. Bartlett

Rick Batza Patrick Bennett Eli Bloom Caroline Bose

Dave Bose

Billie J. Breaux, State Senator

Willis Bright Terri Brown Chester Browne Patrick Brunner Jack Bulger Steven M. Bulloff

Tina Bussell Alicia Byers Eric Cavanaugh Matt Coffman Pete Cleveland David Cunningham Richard Cunningham

Clay Damhorst

Glen E. Darnell

Mike Davis Kevin Dogan

Jim Dougherty Jean Farmwald

Peter Fellegy

Joe Finneran

Billie Fishburn Morris Fishburn

Norman Foust

Mr. and Mrs. R. W. Fryer

Bruce Galbraith Michael Gardner Maurice Geisendorff

Cindy Glenn Mike Graham

George S. Haerle

Jim Hall Neil Handley Ann Hanley Rosy Hansell Don Hargadon Jeff Haves

Ruth R. Hayes

Washington Township Planning Committee (cont.)

Alice Hedden
Linda Hensley
Maurice Hill
Sheila Hoffmann
Dennis Jenkins

Steve Johnes
Chuck Kiphart

Katie Klineman

Ken Kurz

Rebecca Lomax

Marcia Mackey Nancy Martin

Donald Mattson

Jane McCabe

William J. McLane, Jr.

David McClure Chris Muench Jack Muench

Jacquie Newman

Phyllis Newton

Debra Norman

John Ottensman

Jon Owens

Paul Page

Ann Pantzer

Ray Paschke

Ed Paynter

Dara Peters

Kris Proctor

Donald Ream, Jr.

Bloor Redding

Paul Redmond

Stuart Rhodes, Councillor

Bill Rivenberg

Donald S. Rogers

Hiram Rogers

Joy Rothrock

Charlotte Schrock

Dr. Beurt SerVaas, Councillor

Steve Shaffer

Gregory K. Silver

Louise Smith

Nancy Smith

Theresa Smith-Lubbers, State Senator

Kevin Strunk
Dick Tewksbury
Rick Thedwall
Sheri Thomas

TOPICS Newspaper

Bob Trivers

Mr. and Mrs. Robert Vernon

Diana Virgil Mary L. Walker Judy Weerts

Steven West, Councillor

Richard Wheeler

Bill Wilson Stan Wisehart,

H. Emerson Young

Appendix B

Land Use Categories and Abbreviations

The following is a list of land use categories and abbreviations that apply to both developed and undeveloped parcels of property in Washington Township. Next to the land use category abbreviations are the index numbers that sometimes identify them on the land use maps.

On the land use maps, most land uses are identified by their abbreviations only. For example, the map abbreviation for Very Low Density Residential use is "VLD." The map abbreviation for Community Park is "CP." In addition to their land use category abbreviations, parks are also identified on the map by the abbreviation "E" for existing or "P" for proposed park.

The index number for a land use category appears on the map only if that land use is the secondary recommendation for a site. Urban Conservation, Parks and special uses rarely, if ever, are identified as secondary recommendations, and thus are not assigned index numbers.

Residential

Very Low Density (VLD) - 0-2 dwelling units/acre	Index No.: 1
Low Density (LD) - 2-5 dwelling units/acre	Index No.: 2
Medium Density (MD) - 5-15 dwelling units/acre	Index No.: 3
High Density (HD) - 15+ dwelling units/acre	Index No.: 4

Commercial

Office Buffer (OB)	Index No.: 5
Office Center (OC)	Index No.: 6
Commercial Cluster (CC)	Index No.: 7
Neighborhood Shopping Center (NSC)	Index No.: 8
Community Shopping Center (CSC)	Index No.: 9
Regional Shopping Center (RSC)	Index No.: 10
Heavy Commercial (HC)	Index No.: 11
Downtown Mixed Use (DMU)	Index No.: 12

Industrial

Light Industrial (LI)

Heavy Industrial (HI)

Airport Related (AR)

Index No.: 14

Parks

Neighborhood Park (NP) Community Park (CP) Regional Park (RP) Linear Park (LP)

Special Uses

The main uses included in this category are colleges, universities, cemeteries, airports, military installations, hospitals, schools (except elementary schools), fire stations, and other public and semi-public facilities that serve the entire community rather that just the local neighborhood. These users will be identified on the land use plan map by the following abbreviations and/or names:

Land Use	Map Notation	
Hospital	Н	
Schools		
Senior High School	SH	
Junior High/Middle School	JH	
Private High School	PS	
College or University	By name	
Cemetery	C or by name	
Significant Public Facility	By name	
Fire Station	FS	
Other	Public use or by name	

Urban Conservation (UC)

Elected Officials Stephen Goldsmith, Mayor

City-County Councillors and Districts

Gordon Gilmer, 1	Dr. Beurt SerVaas, 2	William Schneider, 3
William Dowden, 4	Linda Beadling, 5	Elwood C. Black, 6
Stuart Rhodes, 7	Randy Shambaugh, 8	Monroe Gray, Jr., 9
Paul Jones, 10	Rozelle Boyd, 11	Betty Ruhmkorff, 12
Cory O'Dell, 13	Z. Mae Jimison, 14	Mary B. Moriarty, 15
Maggie Brents, 16	Jeff Golc, 17	Phillip Hinkle, 18
Kenneth Giffin, 19	Timothy M. Mullin,20	Frank T. Short, 21
Susan Williams, 22	David Smith, 23	Beulah Coughenour, 24
Dr. Phillip Borst, 25	Carlton E. Curry, AL	Ron Franklin, AL
Stephen R. West, AL	W. Tobin McClamroch, AL	

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Metropolitan Development Commission

James J. Curtis, Sr. Jack H. Hall, M.D. Dorothy Miller Mary Ann Mills Walt Niemczura, President Michael W. Rodman Julie P. Scott Randolph L. Snyder

Project Coordination

Daniel Kozlowski, Director of the Department of Metropolitan Development Michael Graham, AICP, Washington Township Administrator

Department of Metropolitan Development, Planning Division

Jon Meeks, Administrator

Thomas Bartlett, AICP, Principal Planner Donald A. Colvin, Senior Parks Planner William Gentry, Senior Planner Jay Getz, Senior Planner

Gina Bush, Graphic Designer Phil Pettit, Reprographics Darrell Walton, Draftsman Susan Wines, Project Intern

Participating Public Agencies

City of Indianapolis Departments:

Metropolitan Development Neighborhood and Development Services Division
Planning Division
Indy Parks, including Indianapolis Greenways
Public Works
Transportation

Indiana Department of Natural Resources Indianapolis Water Company Marion County Health Department